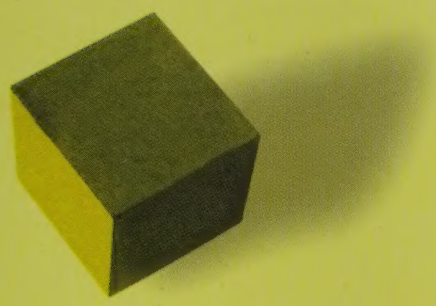

STRATEGIES FOR CHILDREN UNDER SIX

A FRAMEWORK FOR THE 11TH PLAN

JUNE 2007

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June 2007

This paper, prepared at the request of the Planning Commission, builds on a presentation made there on 1 June 2007. It was co-authored by Arun Gupta, Biraj Patnaik, Devika Singh, Dipa Sinha, Jean Drèze, Radha Holla, Samir Garg, T. Sundararaman, Vandana Prasad and Veena Shatrugna.

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Preface

EARLY CHILDHOOD CARE AND DEVELOPMENT (ECCD) has correctly been understood to be the critical foundation for overall growth and development, not only of children, but society on the whole. That it has been seriously neglected in India is amply demonstrated by the poor developmental indices that relate to the situation of children under the age of six; whether they be infant or under – five mortality rates, or the prevalence of malnutrition. It is also a fact that all interventions in this issue so far have changed the situation minimally and far too slowly.

The Supreme Court case (PUCL vs. Union of India and Others, Writ Petition (Civil)196 of 2001) on schemes related to food security includes the Integrated Child Development Services (ICDS) scheme, a significant state intervention for children under six, thereby converting the benefits of these schemes into "legal entitlements". This, and subsequent interim orders have provided a fresh impetus to advocacy efforts on strategies to redress the gross neglect of this issue. A group of people related to The Right to Food Campaign and the People's Health Movement - India (Jan Swasthya Abhiyan) have been engaged with this in various ways, whether it be through grassroots action, research or interventions in policy. Some of these efforts are detailed in the recently released Focus On Children Under Six (FOCUS) Report, 2006.

Simultaneously, a positive environment has been building up in favour of children under six amongst policy makers who are beginning to acknowledge the problem and look for solutions. This is further enhanced by the advent of complementary policy frameworks such as the National Rural Health Mission and Sarva Shiksha Abhiyan, which have the potential to provide much support to Early Childhood Care and Development even though its primary responsibility lies with the Ministry of Women and Child Development.

The Eleventh Plan is a critical process of policy determination for the next phase that could put into motion fresh strategies while positively reinforcing those that have worked before, in order to bring about a substantial change in the dismal picture vis-à-vis child malnutrition, survival and development in the coming few years. These include interventions in the ICDS with a better focus on Infant and Young Child Feeding and outreach to children under the age of three years, as well as complementing strategies of crèches and maternity entitlements to women working in the informal sector.

The Planning Commission also has the potential to provide the convergence and oversight that is critical to seriously addressing the intersectoral issue of malnutrition and ECCD.

It is in this context that individuals associated with the campaigns referred to previously initiated a process of dialogue with the Planning Commission which resulted in the submission of the detailed paper entitled "Strategies for Children Under Six: A Framework for the 11th Plan". Since we had been specifically requested to analyse the experience of countries like Thailand during the developmental phase when they were most akin to current India, we have included a paper entitled *Reducing Child Malnutrition: The Thailand Experience (1977-86)* as an annexure.

The entire 'package' of interventions that are being recommended can only gain ground with continuing debate and advocacy, and it is with that intent that this publication is being put forth in the public domain. The authors would appreciate comments, suggestions and criticism.

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Introduction

The first six years of life (and especially the first two years) have a great and lasting influence on the quality of life of a human being. The health, nutrition, education and development opportunities given to a child at this stage determine, to a large extent, his or her health and wellbeing for the entire lifetime. However, this age group receives low priority in policies, programmes and budgets in India in spite of all indicators showing that greater investments are urgently needed.

The recently released results of the third National Family Health Survey (NFHS-3) show not only the poor state of children under six years of age but also that the progress is very slow. Almost half (46%) of all children under three are underweight (an improvement of only one percentage point compared to NFHS-2 which was carried out eight years back) and almost 80% of children in the age group of 6-35 months are anaemic. Only 23% of babies are breastfed within one hour of birth, and just about 46% are exclusively breastfed for the first six months. Only 44% of all children in the 12 – 23 months age group have received all recommended vaccines and only half the pregnant women had at least three ante-natal check-ups. As many as 57 of every 1000 children die before they reach the age of one year.

On the other hand only about *1%* of the total Union Budget is spent on children under six years of age (hereafter "children under six").[1] They do not receive attention in the newspapers, political debates or the parliament. For instance, according to a recent analysis of parliamentary proceedings by HAQ: Centre for Child Rights, only *3%* of the questions raised in Parliament during the last four years related to children.

[1] HAQ, Centre for Child Rights (2007): 'Budget 2007-08 and Children: A First Glance'. The share of child development (which includes ICDS and the crèche scheme) budget and child health budget in total union budget is 1.3 per cent.

Further, among the child-related questions, less than 5% were concerned with child care and development in the age group of 0-6 years. There is therefore an urgent need to prioritise policies towards children under six, not only to protect their rights but also to ensure that the future generations are healthy and well.

The 11th Five Year Plan offers a unique opportunity for improving and accelerating the impact of all pre-existing strategies and programmes for children under six. The economy is growing at unprecedented rates, and so are the budgetary resources available for social programmes. There is also a renewal of public and judiciary concern for children's issues, making it easier to generate the political commitment required to make these programmes work. In several states, there have been interesting initiatives in this field (e.g. related to ICDS) during the last few years, and much more can be done in this direction.

The care of young children cannot be left to the family alone – it is also a social responsibility. Social intervention is required, both in the form of enabling parents to take better care of their children at home, and in the form of direct provision of health, nutrition, pre-school education (PSE) and related services. Interventions for children under six years (early childhood care and development, or ECCD for short) must broadly address at least three dimensions: child health, child development/ education and child nutrition. These must necessarily be provided simultaneously in the same system of care. Further, while planning for provision of early childhood care and development, it must be kept in mind that different age groups require different strategies. The three crucial age groups are:

1 children 0 – 6 months of age – the period of recommended exclusive breastfeeding,
2 children 6 months to 3 years – until entry into pre-school, and
3 children 3 years to 6 years – the pre-school years, until entry into school.

This paper argues for comprehensive strategies for these groups of children, with a special focus on their nutritional needs, even though there is a close relationship between health, growth, nutrition and development in this age group and these dimensions need to be considered holistically. In fact, it is with this understanding that the Integrated Child Development Services (ICDS) was conceived as an integrated and comprehensive programme addressing all these needs of children under six.

It is well understood that the health and nutrition of a young child is also determined by the status of the mother's health. A malnourished mother often gives birth to an underweight child who in turn grows up to be a malnourished adolescent, and in the case of girls perpetuates the cycle of malnutrition by giving birth to a low birth weight baby. It is also important that simultaneously there are interventions to ensure nutrition of adolescent girls and women, and for women's access to care during pregnancy, and this has been the rationale of the 'life-cycle approach'. Therefore the two aspects to addressing malnutrition i.e. prevention of malnutrition and management of malnutrition, are both linked and complementary, as management of the malnourished child contributes to prevention through its impact on future generations.

The poor status of women has a direct correlation with malnutrition not only through its effect on birth weight but also on child care. The 'care-giver' role of women is so steeped in invisibility, so poorly understood and so much taken for granted, that interventions to provide support are largely missing even as huge bodies of work now exist to show the relationships of women's work, time, energy and power to the health of children. It is this factor that gives rise to

the so called South Asian Enigma, where populations of non-South Asian countries show a better status of child nutrition than South Asian countries even when the former are substantially poorer. This difference has been attributed to relatively high levels of gender inequity in the South Asian context.[2]

It is recognised that the overarching determinants of malnutrition include not only gender inequality, but also poverty. Poverty impacts malnutrition in multifarious ways – by reducing purchasing power for good quality calorie dense foods, by reducing access to health care, by giving rise to physical environments lacking in safe water and sanitation and by impact on education. If this is accepted as one of the main determinants of malnutrition, there must be strategies built in to create livelihoods, reduce poverty and empower the poor. Conversely, no strategy for better nutrition should have the opposite effect.

In this paper, we restrict ourselves to looking at the strategies needed to meet the comprehensive needs of children under six, with special emphasis on nutrition. In particular, we examine the extent to which existing programmes such as the ICDS, with expanded coverage and quality improvements, can be utilised. Complementary interventions such as maternity entitlements, crèches and support to "infant and young child feeding" (IYCF) are also discussed.

[2] T Sundararaman and Vandana Prasad (2006), 'Accelerating Child Survival', Book 3, Public Health Resource Network.

1. General Principles

1.1. Essential Components of Early Child Care

Strategies for children under six require three essential components:

- A ***system of food entitlements***, ensuring that every child receives adequate food, not only in terms of quantity but also in terms of quality, diversity and acceptability.
- A ***system of child care*** that supplements care by the family and empowers women. Such care needs to be provided by informed, interested adult carers, with appropriate infrastructure
- A ***system of health care*** that provides prompt locally available care for common but life threatening illnesses. Such a system needs to address both prevention and management of malnutrition and disease.

1.2. Age 0 – 6 months: Early Initiation and Exclusive Breastfeeding

According to most recent guidelines (WHO guidelines and National Guidelines for IYCF), breastfeeding must be initiated within one hour of birth and exclusive breastfeeding should continue until six months of age. Studies have shown that exclusive breastfeeding alone provides the nutrition that meets all the infant's requirements in this age group. It has also been shown that this is the only preventive and the best treatment for the major killers during the neonatal period (e.g. diarrhoea, pneumonia and sepsis). Recent studies have shown that starting breast-feeding within one hour of birth can help reduce the risk of neonatal mortality by almost a third. Universal coverage of exclusive breastfeeding up to six months of age can save 13 – 15% of all under five deaths, i.e. about more than 3.5 lakh

children each year for India.[3] Continued breastfeeding for two years of age and beyond, along with the introduction of adequate and appropriate complementary feeding from the 7th month onwards, can further reduce the risk of death by 6% or so.

Even though breastfeeding is such a vital means of reducing deaths of young children, and ensuring their best growth and development, little emphasis is paid at the policy level to promoting and supporting mothers to breastfeed their babies adequately. The National Maternity Benefit Scheme (NMBS), which provides for a one-time payment of Rs.500 to pregnant women below the poverty line, partially addresses maternity entitlements and the nutritional requirements of pregnant women and breast-feeding children. However, this scheme is currently languishing in most of the country. The huge gap in maternity entitlements for the majority of women who work in the informal sector needs much more public attention as an important element of social security for the well being of women and children, and specifically for the food security of very young children.

The following are some of the interventions required to ensure exclusive breastfeeding:

- **Breastfeeding Counselling and Support**: Initiating breastfeeding within the first hour and ensuring colostrum feeding requires that the mother be provided support and counselling for this immediately after the delivery. Many myths that exist, especially regarding colostrum feeding, must be countered through counselling women and their families. Awareness campaigns must be directed towards increasing society's support to mothers for exclusive breastfeeding for six months. Mothers need to be given constant support to continue breastfeeding. There should be a support system that allows a home visit twice a week during the first two weeks and once a week later, after birth, to assist and maintain exclusive breastfeeding. It should be done by a skilled trained person, and supported by a specialist counsellor at the cluster level to help solve the difficult problems that a mother may face.

- **Crèches**: Ensuring exclusive breastfeeding requires that mothers stay close to their infants during this period. However, many breast-feeding women, especially poor women, often need to work outside the home, where they cannot take their infants with them. Crèches at/near workplaces to support frequent breastfeeding, flexible hours and breastfeeding breaks must be provided.

- **Maternity Entitlements**: Women must be enabled and compensated to stay home to breastfeed the very young child at the risk of losing wages. This is not a controversial concept, since it has broadly been accepted for the 'formal sector'. Many women are extremely undernourished themselves. While they can still produce adequate milk to feed their infants, exclusive breastfeeding for such long periods can further jeopardise these mothers' health. Women must have access to adequate nutrition and other forms of support to enable them to exclusively breastfeed their infants without endangering either their own health or their economic status. All these, as well as entitlements to health care, are included in the term 'maternity entitlements'.

Crèches and maternity entitlements are not part of current strategy at all. Provisions need to be made for this by

[3] See 'Joint Statement on Infant and Young Child Feeding: Ensuring Optimal Infant Nutrition, Survival and Development' (available at www.bpni.org).

expanding and improving existing programmes such as the National Maternity Benefit Scheme, Rajiv Gandhi Crèche Scheme and ICDS. In the current strategy breastfeeding counselling and support depends entirely upon the skills, training and time of the Accredited Social Health Activist (ASHA), who has many other tasks. Significantly, while many of her other tasks are incentivised, there are no incentives for achieving Infant and Young Child Feeding (IYCF) targets.

Children in this age group also require growth monitoring, immunisation, newborn care and referral services to the health system.[4] Details of what needs to be done, including employing a second worker at the Anganwadi to work specifically on children under 3 years of age, are presented in the section on strategies.

1.3. Age 6 months to 3 years: Complementary Feeding and Day Care

From the seventh month onwards, complementary foods are to be introduced to children along with continued breastfeeding for two years or beyond. Children can eat 'normal home' food (in mashed or semi-solid form), however children at this age can eat only small quantities at a time and therefore need to be fed many (about five) times a day and need to be given food that has adequate calories, proteins and micronutrients.

Some of the interventions required for this age group are:

- Ensuring that frequent meals in adequate quantity are given to the children. This food has to have adequate nutrients in the form of animal proteins (milk, eggs, meat, fish), adequate in fats, fruit and vegetables. This requires nutrition counselling and nutrition and health education sessions for mothers and family members.
- Nutritious and carefully designed take-home rations (THR) based on locally procured food, delivered every week, should be provided as "supplementary nutrition" for children in this age group. Currently THRs are in the form of just grain – this is inadequate. Also, THRs must be combined with nutrition counselling to ensure that they are used for the child rather than distributed amongst the family.
- Crèches must be provided, with trained workers, to ensure that these children are provided with adequate care and development opportunities, especially if there are no adult carers at home due to increased female work participation.
- Further services children in this age group require are regular immunisation and growth monitoring, treatment for anaemia and worms, prompt care for fever, diarrhoea, coughs and colds and referral services for the sick and severely malnourished child.

Most of the above can be provided by the Accredited Social Health Activist (ASHA) and the Anganwadi worker (AWW), *provided* that a second Anganwadi worker is available (the need for a second Anganwadi worker is discussed in more detail in Section 3.3). However, current strategy provides neither for a second AWW, nor for day care/crèches. This is so in spite of the oft and well-argued case for increased focus on children under three for prevention and management of malnutrition.[5]

Thus, the currently-proposed new strategies for desired focus on nutrition of under threes are limited to nutrition counselling and health care by ASHA, that too not incentivised. No other new strategy has been introduced.

[4] The World Health Organisation has recently provided improved growth standards that should be adopted in ICDS and related programmes.

[5] See e.g. A.K. Shiva Kumar (2007), "'Why Are Levels of Child Malnutrition Not Improving?" Economic and Political Weekly, April 14.

1.4. Age 3 to 6 years: Focus on Preschool

It is well established that pre-school education is very significant in helping children to prepare for formal schooling. Pre-school education assists children both to enter school and to remain in the system. A child cannot fully realise her right to education unless she has access to quality early childhood care and education. The interventions required for children in the age-group of 3 to 6 years (until joining school) are:

- A centre-based play-school facility with a teacher trained in conducting preschool activities. Again, this can be provided by the Anganwadi worker only if a second Anganwadi worker is appointed for the community based interventions for children under 3, pregnant and lactating mothers.
- Hot cooked meals, serving the same broad purposes as the Mid Day Meal Scheme in primary schools. These include not only nutritional support but also enhancing child attendance, promoting social equity, providing income support to poor households, and acting as a form of nutrition education (on this see also Section 3.1).
- Health interventions such as growth monitoring, de-worming, immunisation, referral services, etc.

The focus should therefore shift to quality pre-school education as the main task, with nutrition and health services playing roles similar to the Mid Day Meal Scheme and the School Health Scheme in primary schools. Currently hot cooked balanced meals with adequate (animal) proteins, fats, fruits and vegetables are not part of the strategy for this group of children. (See Section 3.1 for further discussion of the "supplementary nutrition programme" under ICDS.)

If it is accepted that the ICDS centre (Anganwadi) is to function as a proper pre-school then a provision has to be made for a teacher-equivalent Anganwadi worker who is fully committed to this activity while a second Anganwadi worker looks after children under three in the community, as well as for Anganwadi cum crèche as and where required. Many children in the 3-6 age group will also continue to need day care services.

From the above discussion it is clear that different strategies are required for addressing the health, nutrition, care and development needs of children under six, depending on their age. The components of the services required by the three age groups among children under six is summarised in the table on the following page:

Essential Components of Early Child Care

	0-6 months	6 months to 3 years (until joining pre-school)	3 years to 6 years (until joining school)
Food	Exclusive Breastfeeding – Counselling and Support for Breastfeeding; supplementary nutrition and maternity entitlements for lactating mother	Supplementary nutrition in the form of nutritious take home rations (THRs), nutrition counselling, nutrition and health education	Nutritious hot cooked meal at the centre
Child Care and Development	Crèches at worksites and maternity entitlements to ensure proximity of mother and child	Crèches; expanding existing crèche schemes and convert 10% Anganwadis into Anganwadi cum crèches	Pre-school at the Anganwadi centre, Crèches/ day care facilities for those who might need it
Health Care	Immunisation, growth monitoring, home-based neo-natal care, prompt referral when required	Immunisation, growth monitoring, prompt care for childhood illnesses, referral care for sick and malnourished children, de-worming, iron supplementation	Immunisation, growth monitoring, prompt care for childhood illnesses, referral care for sick and malnourished children, de-worming, iron supplementation

2. Strategic Interventions

It is therefore seen that the following systems would be required to provide comprehensive early childhood care and development:

- Maternity entitlements to ensure proximity of mother and child during the first six months as well as adequate care to both mother and child;
- Breastfeeding, IYCF and nutrition counselling and support services to families;
- Community based day care services/crèches;
- Pre-school centres;
- Supplementary nutrition;
- Health care services - predominantly community based with institutional backup.

The ICDS which is currently the only national programme to address the health, nutrition and pre-school needs of children under six years has the potential and mandate to fulfil many of these requirements. It requires expansion to reach to all children and improvements in quality. However, ICDS alone cannot provide all the required facilities and services. It should be seen as one component, among others, of a comprehensive strategy for children under six.

Specifically, such a strategy must have the following components:

2.1. ICDS: Universalisation with Quality

Given the central role of ICDS in this context, and the fact that about half the child population and over 70% of all poor children are malnourished, an effective strategy for children under six must include the universalisation of ICDS, or more precisely, "universalisation with quality". The universalisation of ICDS is one of the core commitments of the National Common Minimum Programme, and is also required for compliance with recent Supreme Court orders. In concrete terms, "universalisation with quality" would mean that

1. every settlement has an Anganwadi centre,

2. all ICDS services are extended to all children under the age of six years and all eligible women and girls, and
3. the quality of services is radically improved.

Adequate attention must be paid to the needs of children within the different age categories. The Anganwadi worker must be trained to provide quality preschool education to children in the 3 to 6 year age group. Her tasks would also include providing a hot cooked nutritious meal that is sufficient in fats and proteins, including animal proteins where culturally acceptable.

A second Anganwadi worker must be provided in all Anganwadi centres (other than the existing Anganwadi worker and helper), who will focus on children under three years of age, pregnant and lactating mothers. The tasks of this second Anganwadi worker would include breastfeeding counselling, nutrition and health education and counselling, growth monitoring, provision of supplementary nutrition to children in the 6 months to 3 years age group and pregnant and lactating mothers, motivation for ante-natal care, immunisation and related matters. On some of these tasks, she would work in co-ordination with the ASHA. She would also be required to help in Anganwadi cum Crèche centres. (See Section 3.3 for details.)

Universalisation with quality also requires a range of other steps including adequate and quality training, improved infrastructure, appropriate cost norms to provide nutritious supplementary nutrition, increased community participation, convergence with the Health Department and so on. Infant and Young Child Feeding (IYCF) counselling and support should be recognised as one of the core "services" of ICDS. (Detailed recommendations on ICDS are presented in Annexure I.)

2.2. The National Rural Health Mission

There should be greater convergence between the ICDS and the National Rural Health Mission (NRHM) for prevention and management of malnutrition. At the village level the ASHA and the second Anganwadi worker can work together towards promotion of breastfeeding, nutrition counselling , etc.[6] For this, nutrition related tasks performed by the ASHA (such as ensuring early initiation of breastfeeding) should also be incentivised. The ASHA would further be required to provide essential home based newborn care by making 3 to 7 visits in the first week of birth as well as prompt care on first day of fever, diarrhoea, coughs and colds. Where required, she would have to refer children to the Auxiliary Nurse Midwife (ANM) or Primary Health Centre (PHC).

Treatment of severely malnourished children must be the joint responsibility of the Health Department and the ICDS. While it would be the responsibility of the ICDS to identify severely malnourished children, the Health Department must make arrangements at the sub-centre and PHC level for treatment of such children. This requires setting up nutrition rehabilitation centres in PHCs in areas with high malnutrition, training of ANMs on nutrition related issues, and authorising the Anganwadi worker to refer malnourished children to the Health Department.

Infant and Young Child Feeding (IYCF) counselling and support, while included under ICDS, should also be a mainstream intervention in Reproductive and Child Health (RCH) and NRHM, and listed as a child survival intervention along with

[6] See Amarjeet Sinha (2007): "Fighting Malnutrition: It is possible to make a dramatic difference" on convergence with NRHM on malnutrition, need for a second anganwadi worker to reach out to the households and role of anganwadi worker and ASHA in behaviour change communication.

"immunisation". The creation of "IYCF counselling and support centres", run by skilled women in a cluster of 5-30 villages, should also be considered. (Detailed recommendations on IYCF presented in Annexure IV.)

Further, the Health Department must also ensure that the national programmes of immunisation, iron and vitamin-A supplementation are carried out and de-worming takes place. While the Anganwadi worker would play a role in motivating children for this, the Health Department must ensure adequate and appropriate supplies (such as paediatric formulations of iron). A drug kit with essential drugs must be provided at the village level with either the ASHA or the second Anganwadi worker.

2.3. Maternity Entitlements

Maternity entitlements are virtually non-existent in the country today, especially for poor women working in the informal sector. It is time that a beginning is made to correct this. Tripartite boards and funds must be set up to implement for all sectors of informal work, so that employers contribute. An expanded and improved National Maternity Benefits Scheme must be put in place for all women left out of other schemes/provisions for maternity benefits.

A task force should be set up to look at the existing provisions for maternity entitlements in the country and make recommendations such that programmes are in place that protect the rights of the mothers and children to nutrition, rest and exclusive breastfeeding for six months. The existing laws (Maternity Benefits Act, Employees' State Insurance (ESI) Act, proposed Unorganised Workers Social Security Act, etc.) must be brought in line with the recommended principles. (Detailed recommendations on maternity entitlements are presented in Annexure II.)

2.4. Crèches

As mentioned earlier, provision of crèches is an important intervention in addressing malnutrition, as they also provide proper care and attention to children while allowing their mothers to go for work. Existing schemes such as the Rajiv Gandhi Scheme must be expanded. ICDS cum Crèches must be provided as identified by need (10% of total centres for a start as suggested in 8th Plan). It must be ensured that the provision under the National Rural Employment Guarantee Act (NREGA) for a crèche at the work site is implemented. Labour Welfare Boards as under the Building and Construction Workers Act, 1996, need to be brought in as players for providing crèches. (Detailed recommendations on crèches presented in Annexure III.)

3. ICDS: Specific Issues

Detailed recommendations on ICDS are presented in Annexure I. In this section, we discuss some specific, major steps that are critical for quality improvement and better impact.

3.1. The Supplementary Nutrition Programme

The "supplementary nutrition programme" (SNP) under ICDS has a crucial role to play in combating child malnutrition. Nutrition education alone is unlikely to have a major impact, in a country unable to provide literacy to half its women, especially in the context of food shortages at the household level. Even in the United States, one of the richest countries in the world, there is a substantial school breakfast and lunch programme for the country's poor (which provides bread, cheese, fruit, juices, vegetables, etc.) because it is recognised that nutrition education cannot be a substitute for food.

However, in its current form the supplementary nutrition programme under ICDS cannot be expected to have a significant impact. For children in the age group of 3-6 years, SNP consists of poor, cereal-based items that have little nutritional value. A transition needs to be made towards hot, nutritious cooked meals. The feasibility of providing nutritious cooked meals has been well demonstrated in the context of the "mid-day meal" programme in primary schools, and this approach needs to be extended to children in the age group of 3-6 years under ICDS. As for children below the age of three years, they are virtually excluded from the SNP component of ICDS in most states. For these children, carefully devised "take-home ration" (THR) programmes, combined with nutrition counselling, are recommended.

3.1.1. Nutrition Aspects of SNP[7]

As we move towards the universalisation of ICDS, it is important to learn from past

[7] Contributed by Dr. Veena Shatrugna (Deputy Director, National Institute of Nutrition).

mistakes relating to the supplementary nutrition programme.

1. The magic figure of 300-calorie deficit for the SNP component of ICDS needs to be re-examined. This figure has its origin in the *supervised* studies carried out on pre-schoolers in the 1960s, where improvements in body weights were demonstrated with food supplements of wheat flour, sugar and oil. In addition, health care was available to these children. The studies did not claim that it was the ideal increase in weight, nor did it provide baseline weights (Gopalan 1973). Even then the diet surveys revealed that intakes were only 700cals, giving a deficit of 500cals. The 300cals was most probably calculated based on current weights and not desirable weights, or took into account the child's capacity to consume this amount at one sitting. The latest National Nutrition Monitoring Bureau (NNMB) data (2006-7) show that even today there is a deficit of over 500 calories in the intakes of 1-3 years old and about 700 calorie among the 3-6 years old (see below). There are bound to be additional multiple vitamin and mineral deficiencies when there is a 40% deficit in calories.

Nutrient Intakes of Pre-schoolers

Age (yrs)	Intake (cals)	RDA (cals)
1-3	687	1240
3-6	1020	1690

Source: NNMB 2006-7 (National Institute of Nutrition).

It is, therefore, not surprising that the current nutrition supplements of 300 calories, consisting mainly of cereals, often fail to be reflected in better weights and heights of children (though their nutrition status might be even worse in the absence of these limited supplements). The ICDS programme must incorporate the above information on actually existing food deficits in the country and increase the SNP amounts to 400-500 calories in two sittings.

2. Another important factor to remember is that all the research in the 1960s and 1970s concentrated on finding a "least cost" source of proteins and calories for children. The nation's children have paid a heavy price for this. Ignoring well-known foods for children like milk (rich in protein and calcium), studies were carried out to find vegetarian substitutes for milk proteins. Pulses were chosen as a source of cheap protein but animal proteins (including meat, a very important source of protein) were never considered, even for communities with predominantly non-vegetarian food habits. It is known that even small quantities of meat help iron absorption from the diet. In addition the quality of meat protein is many times superior to cereals and pulses.

3. Today nutritionists are struggling to find sources of protein for children. They tend to focus on cereal-pulse protein, which is one of the poorest sources, instead of milk (one of the best foods for children, which contains protein but also calcium and other nutrients like Vitamin A , etc.), or eggs and meat (it has the best quality of protein and egg yolk contains many other nutrients in the right proportion). Further, the cereal-pulse ratio must be kept at 2:1, and this must be eaten with milk and other foods to be of any use as a source of protein. Over the years even the cereal-pulse recommendation was corrupted to 300 cals from

cereals alone, resulting in massive deficiencies of *all nutrients*. Providing a hot, cooked, nutritious meal consisting of cereal, pulse, eggs and vegetables is essential for the SNP to have an impact. This is not too much to ask for the ICDS programme.

4. It is known that children's ability to eat depends on the volume of food. With very small stomach capacities, they are unable to get all their calories from cereal. In addition cereals do not provide adequate amounts of other nutrients. The WHO advises that 30-40% of calories should be derived from fats (thus cutting down volumes and assuring energy densities), and that children's needs for Vitamin A, calcium, iron, should be derived from milk, eggs, flesh foods, vegetables, fruit, etc. (these will also contribute additional calories). *Cereals and pulses may then be used to bridge the calorie gap.* In India, the whole thing has been reversed, with cereals becoming the overwhelming component of nutrition supplements. Not surprisingly, the cereal overload later led to a simple-minded diagnosis of micronutrient deficiencies, and to a new focus on micronutrient supplementation with chemical compounds. There is a real danger of these chemicals causing toxic sideeffects in undernourished children (micronutrient supplementation is further discussed below).

5. Another important point to consider is that foods like vegetables and fruits contain newly identified protective compounds such as anti-oxidants and phytonutrients, which are protective against cancers and chronic diseases.

As an example of improved SNP menus, the list of foods given below may be used in combination to provide a varied, tasty and energy-dense meal. Preparing these will also contribute to nutrition education.

DAY-1 egg, rice, oil and vegetables
DAY-2 pulse, rice, vegetable, and oil
DAY-3 wheat, groundnut, sugar and oil
DAY-4 egg, rice, oil and milk
DAY-5 groundnut, sugar and pulse

Source	Quantity/frequency	Calories	Nutrients
Egg	1 on alternate days	120	Vitamins A, N3, fats, proteins
Oil	10 ml	90	Fats, Vit. E
Rice/ wheat	60gm	240	Calories, proteins
Vegetables	Carrots, greens, tomatoes, beans, others		Vitamins, minerals, protective compounds, etc.
Groundnut	20gm	80	Calories, proteins, calcium
Sugar	10-15 gm	60	Calories
Pulse	25gm on alternate days	100	Protein, calories, vitamins, minerals
Dairy product			Protein, calcium, Vit A

3.1.2. On "Take Home Rations"

Available experience suggests that take home rations (THR) are the best option for providing food supplements to pregnant and lactating women as well as to children under the age of three years. This is because a pregnant woman, or a very young child, may not be able to come all the way to the ICDS centre every day just to receive food supplements. Further, centre-based nutrition programmes such as cooked meals are often not well suited to the needs of young children, who need frequent feeding throughout the day.

Take-home rations are often distributed on fixed days that may correspond to the ANM's visit, or to health and nutrition activities such as ante-natal care or immunisation. This is a useful arrangement, which helps to ensure regular and transparent distribution of THRs and facilitates these complementary activities.

Though the concern has been articulated that THRs find their way into the family pot rather than the stomachs of the children they are intended for, it is considered (and substantiated by collective experience) that THRs can be effective when combined with nutrition counselling and support at the family level (this, again, requires the involvement of a second Anganwadi worker).

As with nutrition supplements provided at the centre, current THRs have also tended to be cereal-based only. It is recommended that THRs comprise of fats/oils and proteins in addition to cereals and pulses at Rs 3 per child per day (plus food grains) to be most effective.

Of course, pregnant or lactating women and children under three who prefer to come to the centre on a daily basis should receive hot cooked meals as discussed above.

3.1.3. Food Fortification and Micronutrient Supplementation

Fortified foods and micronutrient supplements are rapidly spreading in the supplementary nutrition programme under ICDS, even when they have questionable nutrition value. Often this happens under pressure from various lobbies and commercial interests. Yet, as of today there is no government policy for food fortification in India. Even though we have many reports by agencies like the Indian Council of Medical Research (ICMR) explaining the role of micronutrients and food fortification, we do not have a stated policy on this. In fact there are quite a few "trials" on malnourished children, using different kinds of nutrients in different proportions, and mixed in different vehicles such as atta, rice, biscuits, candies , etc.

These processes and technologies promote centralised production and procurement of food stuff and detract from local control and autonomy over diets. Sometimes they even displace local livelihoods such as milling. They certainly promote the notion that special, 'medicalised' and expensive food is required to deal with micronutrient deficiencies. Where there is, on the one hand, a decision not to spend on more expensive 'natural foods' like milk or eggs, there is no hesitation to spend much more on micronutrient supplements of this variety. However these concerns have still not compelled the creation of a government policy.

To illustrate, consider the case of 'atta' fortification. Wheat flour/ atta is scientifically proven to be the worst vehicle for iron fortification, because wheat flour/atta has phytates that precipitate all the iron. The flour that is used in western countries for fortification is really what we call 'maida' and that is without phytates. Yet in the context of India, we have blindly adopted a western form of fortification for our local 'atta', which will not work. The Government of

Gujarat even plans to introduce fortified wheat into the Public Distribution System (PDS).

In this context it is critical to constitute a regulatory framework for fortification and micronutrients in India. Given below are a few aspects that should be kept in mind at the time of constituting this regulatory framework. The regulations must address the following issues and questions:

1. All large-scale micronutrients fortified food distribution should be halted, and a process of documenting and researching their impact should be initiated before they are put to the public domain. There is a critical need to also research and document the range of chemicals that have been mixed into the SNP component of the ICDS, the PDS and other food schemes. In fact, the Prevention of Food Adulteration (PFA) Act currently does not allow fortification of foods with anything else besides iron and iodine.

2. It would be critical that any request for a trial should be placed before an appropriate authority, constituted by the Government of India, and the trial should be continuously monitored and recorded by an independent monitoring group, so as to record any adverse effects on the populations (note that such trials would necessarily be on undernourished populations).

3. As of today it is the responsibility of the state to provide 'wholesome balanced food' to children and not 'nutrients embedded chemicals' in fortified foods.

4. With regards to the issue of anaemia, even though we have critically high levels of anaemia in the country, there is still a dire need to treat anaemia as a medical condition, with appropriate dosage of good quality iron tablets or paediatric syrups for children. However, unsupervised iron distribution can be harmful in areas where there is a high incidence of malaria, TB and HIV. We need to treat the anaemia first and then only look into providing fortified foods.[8] Fortification does not correct anaemia but may add to the toxicity of the body.

5. Micro-nutrient deficiencies in India exist because of massive macronutrient deficiencies, and if adequate food is supplied, most micronutrient deficiencies will disappear. The implications of this for the ICDS programme clearly are that we must focus on a meal-based strategy rather than a pill-based strategy for micronutrients.

There is an urgent need therefore to constitute a regulatory body which approves all usage of micronutrients only after proper scientific scrutiny and after the bioavailability, and the efficacy of the micronutrients has been established over and above the many benefits of providing hot cooked good quality meals as detailed in the section above.

3.1.4. The Diverse Roles of SNP

Before concluding, it is worth pointing out that the provision of nutritious food to young children under ICDS's supplementary nutrition programme (SNP) serves a range of important purposes, including - but not restricted to – nutritional goals. Indeed, this programme can serve at least seven important purposes:

1. It provides quantitative supplementation by increasing children's food

[8] In a recent unpublished meta-analysis by Professor H.P.S. Sachdeva (presented at the National Institute of Nutrition, April 2006), the impact of iron fortified foods on anaemic populations was studied. Only an increase of 0.4 gms in existing haemoglobin levels was found.

intake, and in particular their calorie intake.[9]

2. It enhances the quality of children's diets by giving them nutritious and diverse food items they may not get at home, such as vegetables, eggs, fruit, etc.

3. The provision of nutritious, cooked meals at the Anganwadi is a form of "nutrition education" - it helps to convey what a nutritious meal looks like, and to spread the notion that children require a regular and balanced intake of various nutrients.

4. The provision of nutritious food at the Anganwadi helps to ensure regular attendance.[10] This is not just because children are attracted by good food, but also because cooked meals help to create a child-friendly environment at the Anganwadi, where children "feel good".

5. The supplementary nutrition programme is a form of implicit income support and an intervention in poverty, since it saves feeding costs to the parents.

6. The sharing of cooked meals at the Anganwadi, irrespective of caste and class, helps to break traditional social prejudices, and to impart egalitarian values to children at a young age. This is an important head start to the kind of socialisation required to bring about social change.

7. Finally, aside from these instrumental roles, nutritious meals at the Anganwadi have intrinsic "enjoyment value". They can bring a touch of colour and well-being in the lives of poor children, especially when they are shared in a welcoming environment. Children aged 3–5 years who are attending the Anganwadi for preschool activities for a period of three hours most certainly require to be fed at least once in that duration to prevent "classroom hunger".

The supplementary nutrition programme needs to be seen in the light of these diverse roles of nutritious meals. A narrow focus on "quantitative supplementation" (important as it may be) tends to miss the rich opportunities presented by this programme. This is, indeed, another important lesson from India's recent experience with mid-day meals in primary schools.

3.2. Priority without Targeting

The suggestion is often made that nutrition programmes (or other components of ICDS) should be "targeted" at specific groups of children. For instance, an early draft of the "Sarva Bal Vikas Abhiyan" proposal[11] suggested that the supplementary nutrition

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[9] Though the concern is sometimes raised that the SNP may displace food provided by the family there is evidence that this rarely happens[Hanan G. Jacoby (2002), Is There An Intrahousehold 'Flypaper Effect'? Evidence From A School Feeding Programme, The Economic Journal 112 (476), 196–221]. If any substitution does happen, it is typically less than one-to-one, so that there is some "net" quantitative supplementation. Qualitative supplementation through the programme can only add to the net gains to the child. There is thus the real potential of augmenting a largely cereal–based home meal with good quality more expensive foods as part of an SNP.

[10] The fact that the provision of cooked food has considerable effects on child attendance is well-documented in the context of mid-day meals in primary schools (see e.g. Drèze and Goyal, 2003) and Khera (2006). If anything, the attraction of nutritious food is likely to be even higher for younger children. The FOCUS survey found that the provision of cooked food at the local Anganwadi raised the probability of regular attendance of an average child by nearly 50 percentage points (FOCUS Report, page 61).

[11] Government of India (2007), "Sarva Baal Vikas Abhiyan", draft, Ministry of Women and Child Development, Chapter 7. Note that targeting of this kind would be a violation of Supreme Court orders on ICDS. More recent versions of this document, however, do not include this approach.

programme (SNP) under ICDS should be "operationalised as follows for the management of underweight"

- **Children with mild underweight**: Caregivers/ mothers would be advised to take care of the children with available foods at home.
- **Children with moderate underweight**: Single ration would be provided along with appropriate nutrition and health advice.
- **Children with severe underweight**: Double ration would be provided along with appropriate nutrition and health advice and referral service."

This targeted approach, however, is problematic for several reasons. First, this issue has to be seen in the light of the massive reach of undernutrition among Indian children. As mentioned earlier, nearly half of all Indian children are undernourished based on standard "weight-for-age" criteria, and nearly 80% are anaemic (National Family Health Survey 2005-6). Thus, only a small proportion of children could be "safely" excluded from nutrition programmes. The financial savings involved in excluding this small minority are unlikely to justify the efforts, costs and risks associated with targeting – especially the risk of inadvertent "exclusion" of many undernourished children.[12]

Second, this approach focuses exclusively on the "management" of undernutrition, at the cost of "prevention". Providing nutritious food to *all* children (through take-home rations at an early age, and nutritious cooked meals from the age of three) helps to ensure that most of them do not fall in the category of "moderate or severe underweight" in the first place. This is much better than trying to extricate them from this predicament after they have lost weight – repairing that damage can be quite difficult, increasingly so as the child gets older. (The notion that children with mild underweight could be effectively protected by advising their mothers to "take care of the children with available foods at home" is wishful thinking.)

Third, targeting is a slippery slope. It paves the way for gradually narrower eligibility restrictions, possibly leading to the "dismantling" of the programme (recent experience with the public distribution system is quite sobering in this regard). Targeting is also divisive and undermines social solidarity. As it is, political commitment to ICDS is quite weak. Targeting would further undermine this fragile support for the programme, as large sections of the population no longer have a stake in it.

Finally, the targeting issue has to be assessed bearing in mind the diverse roles of the supplementary nutrition programme, discussed in the preceding section. For instance, a universal SNP has much greater "socialisation" value than a targeted programme. Similarly, a universal programme is likely to have stronger incentive effects, in terms of promoting regular attendance.

Thus, in many different ways, the targeting of nutrition programmes is fundamentally at variance with the "rights approach" advocated in this paper. Having said this, it should be clarified that we are not arguing for identical treatment of all children. Universalisation does not mean "uniformity". For instance, intensive rehabilitation of severely undernourished children is essential, and this involves a limited form of targeting. We have also argued, elsewhere in this paper, for giving priority to disadvantaged groups (e.g. residents of SC/ST hamlets) in the process of universalisation. Special

[12] There is much evidence of poor reporting of weight-for-age data under ICDS as things stand. Anganwadi workers are often under pressure to "hide" undernutrition (especially severe undernutrition), and the official figures often underestimate the number of malnourished children (see e.g. Garg, 2006).

financial allocations for deprived areas may also be advisable in some circumstances. Thus, we are not ruling out some differentiation of entitlements between different groups. But the basic entitlements (e.g. to a nutritious cooked meal, in the case of children in the age group of 3-6 years) should have universal coverage.

3.3. Need for a Second Anganwadi Worker

The ICDS programme through the Anganwadi centre aims to provide a package of comprehensive services addressing the health, nutrition, growth and development needs of children under six. For this to be done effectively, each Anganwadi centre must have two Anganwadi workers and a helper. The second worker is required because the number of women and children to be covered by an Anganwadi centre is too large to be handled by a single Anganwadi worker. The number of children being covered by a typical Anganwadi centre would be around 100.[13] Added to this, the Anganwadi centre would also have to reach out to pregnant and lactating mothers and adolescent girls. It is impossible for a single Anganwadi worker to provide effective services to such a large number of women and children.

Secondly, as discussed earlier, the services required by the different age groups (namely 0-6 months, 6 months to 3 years, and 3 to 6 years) entail diverse strategies. While children under three mainly require community based services[14] such as exclusive breastfeeding support during 0-6 months including home visits, infant and young child feeding and nutrition counselling, children in the 3 to 6 year age group require centre-based services such as pre-school education. In the present scenario of having one Anganwadi worker, neither of these two groups is being effectively reached. While many have pointed out the neglect of children under three by the ICDS, studies have also shown that the ICDS has failed in providing quality pre-school education to children in the age group of 3-6 years. Therefore having two workers and a helper at each Anganwadi centre is essential to ensure that all ICDS services are provided effectively to the different age groups. The three of them could work as a team with one Anganwadi worker focusing on children under three and the other on providing pre-school education. Both the workers would have to be given basic training on the entire range of issues.

One Anganwadi worker would focus on providing community based services for children under three, pregnant and lactating mothers. Her tasks would include the provision of supplementary nutrition to pregnant and lactating mothers, breastfeeding counselling and support for families of 0-6 month old children, growth monitoring of children under three, distribution of take-home rations, and nutrition education and counselling for families of children under three. Further, she would have to identify severely malnourished children and sick children and refer them to the health system. She would motivate families for immunisation, update the "mother and child card" and work along with the ASHA. This worker would be key to convergence between NRHM and ICDS.

The second Anganwadi worker would run the Anganwadi centre for children in the 3-6 years age group. She would be a teacher equivalent worker who provides

[13] This would be the case when the new norms of one Anganwadi centre per 800 population comes into force; assuming about 80 % of children use ICDS services.

[14] As mentioned in previous sections many of these children also require that crèche/day care services are provided at the Anganwadi centre.

quality pre-school education to the children attending the Anganwadi centre. Further, she would have to ensure that the pre-school children are provided with a nutritious hot cooked meal everyday and health check ups as with the school health programme.

The Anganwadi helper would be responsible for fetching the children, cooking and serving the food in the Anganwadi centre, keeping the centre clean and helping children and Anganwadi worker in play activities. In Anganwadi-cum-crèches, the team would be responsible for running the crèche services for young children.

Other than these three workers of the ICDS programme, the ASHA under the NRHM would also have a role. Since she would be present during the delivery the ASHA would have to be responsible for early initiation of breastfeeding within one hour of birth, ensuring colostrum feeding and follow up support for the first two weeks. She would also be responsible for home-based neo-natal care by making home visits during the first month after birth. These tasks of the ASHA must be incentivised. The ASHA cannot however replace the need for a second Anganwadi worker as she has many other responsibilities such as mobilising the community towards local health planning, help in developing a village health plan, escort women and children requiring medical treatment, provide primary medical care, promote construction of household toilets and so on; other than her responsibilities related to improving reproductive and child health.[15]

The table on the following page summarises the proposed tasks of different workers in the proposed approach.

Another benefit of the two-worker model is that it would enhance the accountability of Anganwadi workers and improve their work environment. The disempowering work environment of Anganwadi workers is one reason for the poor quality of ICDS services in many states. The fact that the Anganwadi worker has to cope on her own with all the challenges of looking after up to 100 children, with little support (if any) from her supervisor, is one aspect of this disempowering environment. The two-worker model, on the other hand, makes room for mutual support as well as peer monitoring.

The "two-worker" model is often resisted on the grounds that it is too expensive. This view fails to appreciate how "cheap" this model actually is. To illustrate, under the current salary norms (Rs 1,000 per month), posting an additional worker in *each* of the country's 8.5 lakh Anganwadis would cost less than Rs 1,000 crores per year. This is a very small price to pay for a measure that could make a big difference. Of course, both the number of Anganwadis and the salary norms are likely to increase during the 11th Plan. But even posting a second worker in 14 lakh Anganwadis, at twice the current salaries, would cost just Rs 3,360 crores per year. This is not much more than what India spends every year to defend the Siachen glacier – can there be any doubt that the well being of 15 crore children is more important?

Further, these figures refer to financial costs, and the "real" economic costs are likely to be much lower. Indeed, to a large extent, the labour of an Anganwadi worker is an efficient substitute for much greater expenses of labour on the part of the children's mothers. For instance, when the Anganwadi worker and helper provide a mid-day meal to the children, their work "saves" a lot of work to the mothers, who don't have to cook for the children at home. While the Anganwadi worker's work is paid, the mothers' work is unpaid, and this asymmetry

[15] For ASHA's roles and responsibilities, see the website of the Ministry of Health and Family Welfare (www.mohfw.nic.in).

Role of Anganwadi workers, ASHA and ANM (in relation to children under six, pregnant and lactating mothers)[16]

Focus Group	AWW 1	AWW 2	ASHA	ANM
	(focus on under-3s)	(pre-school teacher)	Community based	Sub-Centre based with field visits
0-6 months	Supporting exclusive breastfeeding. Motivating for immunisation. Growth monitoring and encouraging early initiation of breastfeeding.		Providing newborn care, supporting management of low birth weight and sick babies. Weighing at birth and recording birth weight. Assisting in beginning breastfeeding within one hour, and establishing exclusive breastfeeding as an accepted community norm. Establishing complete immunisation as a community norm.	Providing immunisation services and timely curative & referral services for sick newborns. Assisting in beginning breastfeeding within an hour (if she is conducting delivery). Management of severely undernourished children.
6 – 36 months	Growth Monitoring. Providing supplementary nutrition in the form of THR. Motivating for complete immunisation, Vitamin Supplementation. Nutrition rehabilitation of severely undernourished children and referral.		Positively influencing complementary feeding practices of families and at the community level. Encouraging adoption of hygienic practices regarding water and sanitation. Early detection and management of childhood illness especially management of diarrhoea. Counselling and follow up of families with severely undernourished children.	Providing timely curative and referral services. Management and referral of severely undernourished children.
3-6 years months		Pre-school education. Growth Monitoring. Organising cooked mid-day meal. Nutrition rehabilitation of severely undernourished.	Identification and referral of sick children. Counselling and follow up of families with severely undernourished children.	Health Check ups and curative services. Management and referral of severely undernourished children.
Pregnant women	Growth Monitoring and Supplementary Nutrition.		Working with women, families and the community to ensure adequate weight gain through appropriate nutrition, reduction in workload, rest and accessing timely health services especially supporting clean and institutional delivery.	Antenatal Care. Promoting delivery by Trained Birth Attendant. Promoting and Supporting Institutional Delivery.
Nursing Mothers	Supplementary Nutrition, breastfeeding support.		Postnatal Care, Encouraging Early initiation of breastfeeding.	Postnatal Care, Immunisation.
AWW cum Crèche (0-6 years) (10% of all AWWs)	Both the Anganwadi workers to be full time workers where they continue to perform their regular duties and also share the responsibility of running the crèche.			
Anganwadi Helper (full time in case of AWW-cum-crèche)	Cook and serves food in the crèche. Help children and AWW in play activities.			

[16] This table is adapted from Biraj Patnaik and others, "A Call for Change: Structural Changes and the ICDS Programme" (a discussion note for the Planning Commission) and T. Sundararaman and Vandana Prasad (2006), "Accelerating Child Survival", Book 3, Public Health Resource Network.

Learning from Thailand's Experience*

Thailand (1980s)	India (2007)	How to Close the Gap
Able to halve child malnutrition levels in 1980s	Child malnutrition rate stagnant for last 5 years	Strengthening ICDS
Coverage – Universal, Very High Coverage ensured	Coverage - low, two-third children left out	Increase No. of AW centres Increase no. of workers in each AWC to 2 to enhance outreach
SNP- Strong universal SNP provision, provided 450 kcal in 100 grams by providing pulses and fats	SNP – 300 kcal, mainly cereal	Raise SNP norm in ICDS to Rs.3 per child/day plus 80 gram grain. Provide oil, pulses in take home rations for under 3s, Provide hot cooked meals with eggs/milk for 3-6 year olds
High Manpower intensity: 1 nutrition worker per 20 children, helps to ensure very high coverage of under-6s and effective nutrition education on breastfeeding, complementary feeding,	Worker: Child ratio at 1:100, Single part-time worker per centre unable to devote time to home visits	Having two AW workers each in 14 lakh centres will enable a ratio of 1 worker per 25-30 children and effective nutrition education and coverage
Universal Iron, Vitamin Supplementation -- successful in reducing Anemia	Supplementation part of strategy and policy but huge gaps in providing it - Absence of pediatric Iron tablets Irregular IFA supply for pregnant women	Ensure regular supplies of Iron supplements to women and children
Strong linkage with Health	Weak linkage with health so far, Malnutrition not seen as any Department's responsibility, but NRHM present as an opportunity	ICDS-Health Convergence at all levels from ASHA onwards Regular drug kits to AW centres Clinical support for Grade 3 & 4 children needing institutional check-up or care

*[illegible] See Annexure 5 for details

creates the impression that a "cost" is involved, but in fact, resources are being saved! This would be reflected in the financial costs if mothers' work were paid, and it is the absence of any payment for domestic work that creates the illusion that Anganwadi workers are "expensive". Taking this into account, the economic cost of the two-worker model is likely to be much lower than the financial cost, and good economics requires us to focus on the former.

This conclusion would be reinforced by a proper accounting of the *benefits* of having additional Anganwadi workers. It is not just that the children will be healthier, better nourished and better prepared for school. Anganwadi workers are also useful role models and agents of change in a fairly conservative and patriarchal rural society. In many villages, the Anganwadi worker is the only woman who has a paid and dignified job, with opportunities to develop her creativity and talent. Her presence can greatly help, in many different ways, to give younger girls a sense of possibility and to secure a better deal for women in society (in some states, for instance, Anganwadi workers have played an active role in recent campaigns against domestic violence and sex-selective abortion). All this adds to the social value of Anganwadi workers.

In short, the two-worker model is not just enlightened social policy but also sound economics. India has a "comparative advantage" in labour-intensive provision of social services; large-scale mobilisation of educated women as Anganwadi worker would be an excellent use of this comparative advantage.

3.4. Making ICDS Work[17]

3.4.1. Introduction

In moving towards universalisation of early child care, one major challenge is the management of a large public service delivery programme. Much of the hesitation to sanction such an expanded scheme stems from the past experience with implementing ICDS. Poor capacities to manage such a large public programme, poor governance, high leakages, lack of local accountability, low motivation levels and poor community ownership are some of the problems that have plagued ICDS.

An understanding of poor ICDS performance as stemming mainly from operational problems often leads to a search for "contracting out" solutions, where commercial and not-for-profit non-governmental institutions are asked to organise the services. But since the central problem behind the inefficiency of state-run ICDS is mis-governance and not merely lack of capacities, any attempt at contracting out part or all the functions usually leads to even greater problems of governance – but now without the built-in checks and balances that public service delivery has.

Thus, we need to face the operational issues of managing such a large and expanding programme as a public service. Some of the key operational issues are discussed below.

3.4.2. Decentralisation and Community Participation

Decentralisation and the involvement of communities is the first key aspect that must be considered. For instance, the selection of Anganwadi workers must be done by the Panchayat – but through a supervised process that involves the community. It should not be left to the whims of the local elite who often control the Panchayat, but nor should it disregard the central authority of the

[17] This section draws on an earlier discussion note for the Planning Commission, "Poised for Change: Structural Change and the ICDS Programme", prepared by Biraj Patnaik (2007) with inputs from many contributors (who have been acknowledged in the original paper.

Panchayat, for the alternative is usually an unacceptable process where selection is left to the bureaucracy or the local legislative member. What is said for selection is also applicable to the process of accountability and of monitoring and support - primarily by the Panchayat but not passively left to it.

There is very little community involvement in the current programme. Except for rare instances like the *Mitanin* programme in Chhattisgarh or the work of the Rajmata Jijau Mission in Aurangabad, the involvement of communities and Panchayats has rarely gone beyond sub-contracting tasks (like the cooking of the meals) with very little real financial or other powers. Yet there are large areas of untapped potential for community contribution.

Informed and involved communities can have a major impact on nutrition practices and outcomes. For instance, one of the barriers in the fight against undernutrition is the gross social under-recognition of this issue. Community mobilisation can play a critical role in influencing the way society perceives undernutrition and creates a social will to fight it.[18]

Community mobilisation can also play a major role in supporting behaviour change in long-standing child care practices, and in achieving improvements in the utilisation of ICDS services. For instance, there may be a variety of genuine reasons for a mother not sending her child to the Anganwadi (e.g. distance from the centre, irregular opening hours, low-quality food, lack of trust in the Anganwadi worker). In such a situation, a stand-alone Behaviour Change Communication (BCC) message to the mother, asking her to send her child to the Anganwadi, may not work, but the community may be able to tackle some of the underlying issues. Community mobilisation is needed to create an enabling atmosphere for more appropriate child care practices and empowerment of the local community, especially families facing marginalisation or social exclusion to be able to collectively bargain and put pressure on local and non-local governance systems to secure essential public service entitlements that are currently denied to them. Community monitoring of ICDS can also help in ensuring greater regularity and quality, and in building a more functional relationship between the AWW and the community.

The Accredited Social Health Activist (ASHA) is one of the key agents in achieving active community participation and in promoting equity of access at the village level. Some of her roles have been discussed earlier, but it is important to recognise that the ASHA is also a significant link between the community and the government (particularly the health system). Other important tools of community mobilisation arising from the National Rural Health Mission include the monthly "health and nutrition day", and the Village Health Committee (VHC). These committees are initiated by the ASHAs with the help of the AWWs, and they are also intended to link with existing community institutions such as Mahila Mandals, Youth Clubs, Self Help Groups (SHGs) and Panchayati Raj Institutions. VHCs can be an important agent of community mobilisation, e.g. by motivating parents to send their children to the Anganwadi, monitoring undernutrition levels in the village, drawing out an action plan, spreading awareness of related-health issues, helping AWWs in Early Child Care Education (ECCE) and BCC tasks, helping remote hamlets to access ICDS services, and monitoring Anganwadis, among many other possible activities. They can also act as forums through which women become more aware of their rights and fight gender discrimination in health, nutrition

[18] On this issue, see e.g. Samir Garg (2006) and Dipa Sinha (2006).

and other fields. Other community-based groups and forums (such as Mahila Mandals, SHGs, Gram Sabhas and Youth Clubs) can play similar roles, in collaboration with ASHAs and AWWs. Adequate budgetary provision (at least 5% of the scheme budget) should be made for supporting such community mobilisation processes.

Another useful aspect of decentralisation would be district-specific planning. Different districts have different technical and administrative requirements. They need to tailor communication materials, training programmes and nutrition schemes to suit their specificities. District plan designs, and then fund allocations based on such plans, is an operational challenge - but the effort can be quite rewarding, and requires little additional resources. However, district level planning needs to proceed "bottom up", based on village-level and Panchayat-level planning. Panchayat-level Planning can be used as a mechanism for bringing the various aspects of ICDS together, as well as for achieving local convergence between ICDS, the ASHA programme and Sarva Shiksha Abhiyan. The plans should clearly outline the roles of different sectors in contributing towards the elimination of under-nutrition and the provision of comprehensive child care.

3.4.3. Developing Human Resources

A second essential element for securing better operational results is better capacity building. About 5 to 10% of expenses must be earmarked for capacity building of the Anganwadi workers and other staff on a regular basis. Continued capacity building also requires the creation of adequate institutions for this purpose, and an effective human resource policy for these institutions. Capacity building is also needed for effective decentralisation.

This involves re-examining the existing modes, means and sites of training and development of training content and material. The inadequacy of present arrangements is reflected in the fact that the Government of India allocated a sum of just Rs 87 crores in the last financial year for training activities, in a programme that has more than a million workers and helpers. Nearly a fourth of this money apparently remained unutilised.

Training, both initial ("pre-service") as well as ongoing ("in-service"), is usually recognised as an important component of programme implementation. However, what is less well understood is that training is an essential part of the programme evolution and continuous quality improvement process. Training sessions, whether in the field or in the classroom, can provide a much-needed space for participatory reflection and learning on programme goals, design, processes and practices.

Unfortunately, the current training system appears to be quite divorced from field reality and practitioner experience. AWWs from rural and tribal locations are provided initial training at the district level by faculty who have limited or no experience in (say) nutrition counselling of poor families, growth monitoring or early childhood education. Moreover, most training institutions have neither any field sites nor directly run Anganwadi centres which could enable them to make the training more practice oriented. Ongoing field-based training is almost absent as most supervisors focus mainly on registers, attendance, salaries and numbers rather than processes.

One reason for the disjunct between training and field reality is that training curriculum, syllabus and material are centrally determined. Thus, the contextual realities (e.g. cultural understanding of child development, food practices,

and socio-economic background of the AWW) are not taken into account. Further, the training process has no direct linkage with programme implementation. Trainers interact either with institutions such as National Institute for Promotion of Child Care and Development (NIPCCD) for resources and guidelines, or with the ICDS Commissionerates and Directorates for funds and the annual training plan. They have little contact with the Block-level Supervisors and Child Development Project Officers (CDPOs)/Assistant Child Development Project Officers (ACDPOs) from which trainees are nominated, and limited understanding of the ground realities. These trainers are not part of ICDS review processes at the Block or District levels, and do not seem to be treated as 'experts' by the programme.

Thus, it appears that "training" in the ICDS programme largely boils down to centrally-determined information, transmitted down the chain to the AWW who is then expected to convert it into practice and improve child development indicators for the entire programme. Building more lively and effective training programmes, linked with ground realities, would require:

1. Building crucial linkages between training, programme implementation and review, and child development knowledge and practice.
2. Building technical and institutional capacity in the ICDS programme to develop into a learning system.

The following steps would be useful in this regard:

- Decentralised development of training curriculum, approaches and material (say, at the State or District level).
- Convergence of ICDS and Reproductive and Child Health (RCH) training, not simply by training the respective staff together but also through joint development of the training modules.
- Allocating AWTCs (Anganwadi Training Centres) for capacity building in specific region at the District or Sub-District level.
- Recognition of pre-school education and nutrition counselling as essential components of training programmes.
- Developing a system for continuous field level support (for instance, identifying a relatively accessible Anganwadi centre and developing it as a local resource centre, where the supervisor/trainer can facilitate peer learning through monthly cluster-level meetings).
- Convergence between MLTCs (Mid Level Training Centres) and AWTCs.
- Upgrading MLTCs and AWTCs, not only as training centres but also as local resource and research centres.
- Enabling MLTCs and AWTCs to directly run Anganwadis in their campus/vicinity.
- Building linkages between local Colleges of Home Science and Social Work and training institutions.
- CDPOs and POs (Project Officers) should be involved in training needs assessment and training review as a part of programme review and evaluation.

3.4.4. Governance Reforms

The central issue of good governance is the political will and leadership required to make the public delivery of child care services a reality. Such political leadership is not only needed for effecting a change of policy, it also plays a major role in efficient implementation of the programme. In its absence, the system becomes prone to high levels of corruption and mis-management. Good governance is needed to define standards and norms for access and quality of services and to monitor and support the programme to ensure that these standards are

attained and sustained. Problems of uneven development and issues of equity in access, require centralised action in the form of rigorous programme monitoring and appropriate reallocation of resources and the provision of additional support to such areas and sections which lag behind. This in turn requires a more accountable and responsive administration. Decentralisation, adequate space for public participation, professional organisation of work, better workforce management and capacity building are the cornerstones of building a responsive and accountable administration and these need to proceed apace with the greater devolution of funds for the programme.

It follows that effective indicators of good governance need to be developed for ICDS. The transfer of funds from the centre to the states needs to be linked to governance reform, as is needed and agreed upon with each state. No state would fail to get a minimum amount of resources it needs – but larger allocations would be linked to more effective governance reform. We note, however, that this approach has had only limited success in the context of bilateral aid. Better success with governance reform requires that the indicators of good governance, and the financial conditionalities, should be in the public domain so as to increase administrative and political accountability for programme implementation. Such governance reform is essential to ensure that the concerned departments are able to make timely and effective use of available funds.

Output and outcome indicators, and a reliable monitoring system, also need to be put in place so that the progress of ICDS in each district is known. This would make it possible to set time-bound targets – both for a sharp reduction of malnutrition and for developing a comprehensive and universal system of early childhood care and development.

4. Financial Requirements

Low budgetary allocations have been one of the key factors responsible for the limited impact of ICDS and related programmes so far. For instance, the current allocation for ICDS is only around one rupee per child per day (on average, for all children under six). This level of expenditure is utterly inadequate to ensure effective and universal programmes. The international experience also shows that much higher allocations are needed for actually making a dent on malnutrition, ill-health and gaps in psycho-social development. Thus, a major increase in financial allocations is urgently required.

The table on financial requirements on pages 37 and 38 presents estimates of what is required for fair implementation of the framework proposed in this paper during the 11th Plan. The reference year for these estimates is the "terminal year" of an expansion phase, by the end of which

(1) ICDS would reach universal coverage, and

(2) substantial progress would have been made towards providing other support structures such as maternity entitlements, crèches and supplementary nutrition for adolescent girls.

The terminal year of this expansion phase is not specified, but it would have to be, at any rate, within the 11th Plan.[19]

The estimates in the table are based on the following assumptions:

1. Number of Anganwadi Centres (AWCs):

This has been fixed at 14 lakh, in line with Supreme Court orders as well as with independent estimates of the number of AWCs required to implement improved norms for

[19] In this connection, it is also important to remember that the Supreme Court judgement of 13 December 2006 on ICDS directs the government to expand the number of Anganwadi centres to 14 lakhs by *December 2008*.

the creation and placement of Anganwadis. Of these, we assume that 10% (1.4 lakh) will have the status of "Anganwadi-cum-crèche" in the reference year (as a beginning towards the universal provision of crèche facilities).

2. Number of Children:

It is estimated that there are currently about 14 crore children under six in the country, of which 10 crore live in rural areas and 4 crore reside in urban areas. It is further estimated that about 1 crore children live in urban slums.[20] Allowance has to be made for the fact that not all parents may wish to enrol their children at the local Anganwadi. Assuming that about 75% of children in rural areas and urban slums are enrolled, the budget estimates are for 8 crore children under six. Of these 8 crore children, 10% (0.8 crore) would be enrolled in Anganwadi-cum-Crèche centres.

3. Supplementary Nutrition Programme (SNP):

The SNP allocation here is similar to the enhanced norms that have been proposed to the Planning Commission for the Mid-Day Meal scheme[21], i.e. Rs. 3 per child per day (and in addition to 80 grams of grain).

4.Second Anganwadi Worker:

As explained earlier, a second Anganwadi worker is essential to provide adequate care to children below the age of three years along with food supplements and quality pre-school education for those in the age group of 3-6 years. Thus, a provision has been made for implementation of the two-worker model in all AWCs.

5.Remuneration of Anganwadi Workers and Helpers:

For four hours of skilled work per day for around 25 days a month, each Anganwadi worker should be paid around Rs.2,000 per month as remuneration. The helper should be paid around Rs.1000 per month.

6. Anganwadi-cum-Crèche Centres:

These centres would require higher allocations, for both staff and food. The two Anganwadi workers and helper would have to be paid for full-time work, and children attending the crèche will have to be given adequate food. Thus, we have made an allowance for higher remuneration of Anganwadi workers and helpers at Anganwadi-cum-crèche centres (Rs 3,000 and Rs 1,500 per month, respectively), and doubled the provision for supplementary nutrition.

7. Training of Anganwadi Workers:

The allocations proposed are at higher than current levels so that the gaps in this aspect can be closed.

8. Maternity Entitlements:

For maternity entitlements, we propose a national scheme on the lines of the "Dr. Muthulakshmi Reddy Maternity Benefit Scheme" in Tamil Nadu. This involves cash support of Rs 1,000 per month for six months starting from the 7th month of pregnancy, for care during pregnancy and after delivery. We recommend that, as a first step towards eventual universal coverage of maternity entitlements, 25% coverage should be achieved in the reference year. Other schemes would also need to be developed to cover the range of circumstances of women working in different sectors (see Annexure II for further discussion).

Under these assumptions, the proposed plan of action would cost around Rs 33,000 crores (at 2006-7 prices) in the reference year, including "recurrent costs" of Rs 30,000 crores per year. If the Indian economy grows at 8% per year on average during the 11th Plan, this financial requirement will represent about *one half of 1%* of India's GDP five years from now. This is a very reasonable price to pay to protect 14 crore children from hunger, ill health and related deprivations.

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[20] Government of India (2007), "Sarva Baal Vikas Abhiyan", draft, Ministry of Women and Child Development, page 1; based on 2006 Population Projections from Census data.

[21] Report of the Working Group on Food and Nutrition Security (chaired by Professor K. Sundaram), Planning Commission, 2007.

FINANCIAL REQUIREMENTS
(For terminal year of the ICDS "universalisation" phase – see text)

ICDS: UNIVERSALISATION WITH QUALITY					
Assumptions	**No.**				
Total under-6 Children covered	8 Crores				
Children covered by AWC cum Crèches	80 lakh				
Pregnant, lactating women covered	1 Crore				
Total Anganwadi centres (AWCs)	14 Lakh				
Anganwadi centres also working as Crèches (10% of total centres)	1.4 Lakh				
Anganwadi Buildings to be built and equipped per Year	2 Lakh				
Budget Required (Rs. Crores)	**No.**		**Rate (Rs.)**	**Frequency of Cost per Year**	**Amount (Rs. Crores)**
RECURRING COSTS					
1 **Supplementary Nutrition**					
1.1 SNP children (@ Rs3/day for 300 days/yr)	72000000		3	300	6480
1.2 SNP pregnant/lactating women (@ Rs 3/day for 300 days/yr)	10000000		3	300	900
1.3 SNP for children in AWC cum Crèches (@ Rs.6/day for 300 days/yr)	8000000		6	300	1440
1.4 Rice/Wheat (80 gram per child per day)	80000000		0.8	300	1920
2 **Education/Health Kits**					
2.1 Pre-School Education Kits for AW Centres (Rs. 1000 per AWC per year)	1400000		1000	1	140
2.2 Medicine Kits for AW centres (Rs. 1000 per AWC per year)	1400000		1000	1	140
2.3 IEC Materials (Rs 25000 per project per year)	6000		25000	1	15
3 **Untied Grant to AWCs (Rs 5,000 per AWC per year)**	1400000		5000	1	700
4 **AW Centre Rent (Only till centres don't have their own buildings)**					
4.1 Rural	600000		200	12	144
4.2 Urban	200000		1000	12	240
5 **Honorarium for AWWs/Helper**					
5.1 AWW 1 honorarium (at Rs.2000 per month)	1260000		2000	12	3024
5.2 AWW 2 honorarium (at Rs.2000 per month)	1260000		2000	12	3024
5.3 AW Helper/Cook (at Rs.1000 per month)	1260000		1000	12	1512
5.4 Workers in AW cum Crèches (3 full time workers at Rs.3000, Rs.3000 and Rs1500)	140000		7500	12	1260
6 **Training**					
6.1 Existing Anganwadi Workers (6 days of training @ Rs.150/day)	750000		150	6	67.5
6.2 New AWW1 (10 days of training @ Rs.150/day)	650000		150	10	97.5
6.3 AWW2 (10 days of training @ Rs.150/day)	1400000		150	10	210
6.3 CDPOs (8 days of training per year at Rs. 300 per day)	6000		300	8	1.44
6.4 District POs (8 days of Training at Rs. 300 per day)	600		300	8	0.14
6.5 State Officials (3 officials per state, 8 days of training at Rs.600 per day)	90		600	8	0.04

7	**Salaries and Office Expenses**				
7.1	State Office	30	1200000	1	3.6
7.2	District Office	600	1000000	1	60
7.3	Project/Block Office	6000	700000	1	420
8	**Contingencies**				
8.1	Project	6000	30000	1	18
8.2	District	600	60000	1	3.6
8.3	State	30	100000	1	0.3
9	**FUEL**				
9.1	Project	6000	100000	1	60
9.2	District	600	100000	1	6
9.3	State	30	100000	1	0.3
	A. SUB-TOTAL (RECURRING)				**21887**
	NON-RECURRING COSTS (CAPITAL EXPENDITURE)				
10	Equipment and Furniture for AW centres	200000	5000	1	100
11	Anganwadi Buildings (@ Rs.1.30 lakh materials cost per Building with unskilled labour component of Rs. 40000 from NREGA) and assuming 200000 centre buildings will be constructed per year	200000	130000	1	2600
	B. SUB-TOTAL (NON-RECURRING)				**2700**
	C. TOTAL (ICDS)				**24587**
	Maternity Benefits (Rs.1,000 per month for 6 months, for 65 lakh women [25% of all pregnant women] to begin with – see text)	6500000	1000	6	3900
	SNP for Adolescent Girls Covering 5 Crore adolescent girls (at Rs.3 per day for 300 days)	50000000	3	300	4500
	D. GRAND TOTAL				**32987**
	Components from Other Programmes				
	NRHM ASHA incentives (Rs.100 per family counselled (4 neo-natal visits) assuming 1 Crore families will get counselling per Year	10000000	100	1	100
	NREGA Labour Component of AW Building Construction (assuming 2 lakh buildings will be constructed per year)	200000	40000	1	800

5. Summary of Key Recommendations

Children under six have been grossly neglected for a long time in Indian planning, and the country is paying a heavy price for this today. The 11th Plan presents an opportunity to correct this bias and give children their due. However, this cannot be done through marginal expansion or superficial "reform" of existing child development programmes. It requires bold initiative, new strategies and – not least – a massive increase in financial allocations for children under six.

In this paper we have tried to present a broad framework of action for "children under six" in the 11th Plan. Before concluding it may be useful to summarise some of the key elements of this framework (more detailed recommendations are presented in the Annexures):

General Principles

Rights approach: This framework recognises that child care, health care, nutrition and development are basic rights of all Indian children.

Age-specific interventions: Attention has to be paid to the varying requirements of different age groups (specifically, 0-6 months, 6 months to 3 years, and 3-6 years), and to the need for corresponding interventions.

Three core interventions: These interventions involve the integration of three related systems, focusing respectively on: (i) food and nutrition; (ii) health services; and (iii) child care.

Role of ICDS: Many of these interventions can be taken care of through the Integrated Child Development Services (ICDS), provided its initial vision is revived.

Complementary strategies: However, other institutional arrangements are also required, including (i) maternity entitlements; (ii) crèches and

child care arrangements; (iii) institutionalised support for "infant and young child feeding" (especially breastfeeding).

Convergence: Effective strategies for children under six also require active "convergence" between core programmes, especially ICDS, the National Rural Health Mission (NRHM) and Sarva Shiksha Abhiyan.

Decentralisation: A decentralised approach is required, fostering participatory planning, community ownership, responsiveness to local circumstances, and the involvement of Panchayati Raj Institutions.

Community Action: Various forms of community action need to be promoted. These include monitoring and supporting the local Anganwadi, selection and evaluation of Anganwadi workers, participatory planning, use of untied grants, etc. This process should be adequately planned, budgeted for and institutionalised. The ASHA needs to be empowered to play the critical facilitation role between the communities, Panchayati Raj Institutions and the programme.

Capacity Building: Major investments in capacity building and training are required at all levels, all the more so as early child care and development (ECCD) is poorly understood. Programmes of such scale and complexity as ICDS cannot succeed without extensive investments in improving management skills and practices.

Administrative Reforms: Capacity building and decentralisation are essential, but not sufficient conditions of improved governance. There needs to be a central mechanism that sets standards, maintains quality, safeguards equity concerns, redresses uneven development and allocates (and accounts for) resources in a transparent and equitable manner. This would require improved institutional frameworks, improved workforce management policies and professionalisation of management. Accountability at senior levels of administration and governance needs to be measured through appropriate mechanisms, subjected to public scrutiny and linked to flow of funds.

ICDS: Key Recommendations

Detailed recommendations on ICDS are presented in Annexure 1. The following are particularly important:

Universalisation with Quality: "Universalisation with quality" should be the overarching goal for ICDS in the 11th Plan. This would include raising the number of Anganwadis to a minimum of 14 lakhs (with priority to disadvantaged groups), extending all ICDS services to all children under and six and all eligible women, and improving the quality of services.

Focus on Children Under Three: ICDS should give much greater priority to children under the age of three years. This would include providing adequate incentives to ASHAs for the relevant services (including home-based neonatal care, breastfeeding and nutrition support), provision of nutritious take-home rations (THR), better training on issues related to children under three, and the adoption of the "two-worker" model.

Two-worker model: Adequate care of children under three combined with effective pre-school education for children aged 3-6 years cannot be achieved without the involvement of two Anganwadi workers (along with the Anganwadi helper).

Anganwadi-cum-crèches: Crèches ensure that adequate care and development opportunities are available to children, whose mothers go for work outside the home (especially if there are no adult carers at home). Crèches are required for children, in both the 0-3 and the 3-6 age groups, for

the entire day. The Anganwadi centres can provide this service in the village. To begin with, we recommend that 10% of all Anganwadis be converted to Anganwadi-cum-crèches. This would be mean that these centres are open full time, both the workers are present all day and are given additional training on running a crèche.

Pre-school education: For children aged 3-6 years, pre-school education should be the primary focus of ICDS activities. Aside from adoption of the two-worker model, this requires appropriate training, infra-structure, equipment, super-vision and support.

Nutrition programmes: For children in the age group of 3-6 years, the supplementary nutrition programme (SNP) should be based on hot, cooked, nutritious meals, along the same lines (and with the same financial norms) as the "mid-day meal" scheme in primary schools. For younger children, it should be based on carefully-designed "take-home rations" (THR), combined with nutrition counselling.

Other Recommendations

Maternity Entitlements: A national scheme for maternity entitlements in the informal sector, on the lines of the "Dr. Muthulakshmi Reddy Maternity Benefit Scheme" in Tamil Nadu (including cash support of Rs 1,000 per month for six months starting from the 7th month of pregnancy, for care during pregnancy and after delivery), should be introduced. A National Task Force should be created to further investigate the modalities of universalising maternity entitlements to all working women.

Crèches: Apart from the creation of Anganwadi-cum-crèches on a pilot basis (in 10% of all Anganwadis), there should also be a major expansion and improvement of crèche facilities under the Rajiv Gandhi National Crèche Scheme.

Infant and Young Child Feeding: Infant and young child feeding counselling and support should be recognised as one of the core "services" both in ICDS and NRHM, with a clear budget head. This should include skilled counselling and support (incentive based) for initiating breastfeeding within the first hour of birth, continued counselling and support in the form of home visits for maintaining exclusive breast-feeding for six months, and counselling and support for continuing breastfeeding for two years or more, along with adequate and appropriate complementary feeding.

Financial Commitments: Fair implementation of the above recommendations would require a budget of around Rs 30,000 crores at 2006-7 prices, to be reached in a phased manner within the 11th Plan. By the end of the 11th Plan, this is likely to represent just over *one half of 1%* of India's Gross Domestic Product (assuming a growth rate of 8 per year). This is quite reasonable, considering that children under six account for 15% of the population, and represent the future of the country.

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Annexures: Detailed Recommendations

ANNEXURE 1

Integrated Child Development Services (ICDS)

I. General recommendations

I.1. Overarching goal

1. Universalisation with quality:

The core objective for ICDS in the 11th Plan should be "universalisation with quality". This would involve:

1. ensuring that every hamlet has a functional Anganwadi;
2. ensuring that all children under six and all eligible women have access to all ICDS services; and
3. enhancing the quality of ICDS services.

I.2. Coverage of ICDS

2. Universal coverage:

Every household should have convenient access to an Anganwadi (or to a mini-Anganwadi, for the time being, in the case of tiny settlements).

3. Improved norms:

The "population norms" used for the creation and placement of Anganwadis should be revised, in line with the goal of universalisation with quality. The improved norms should ensure that every household has convenient access to an Anganwadi (or mini-Anganwadi, if applicable).

4. Anganwadis on demand:

As a safeguard against possible failure to apply the "improved norms", rural communities and slum dwellers should be entitled to an "Anganwadi on demand" (within, say, three months as mentioned in the Supreme Court judgement of 13 December 2006) in cases where a settlement has at least 40 children under six but no Anganwadi. The list of settlements eligible for Anganwadi on demand could be gradually extended over a three-year period, starting with the most vulnerable communities (e.g. SC/ST hamlets and urban slums) and ending with "all settlements".

5. Open enrolment:

Every child under six should be eligible for enrolment at the local Anganwadi. There should be no eligibility criteria other than age (and especially no restriction of ICDS to "BPL" families), and no ceiling on the number of children to be enrolled in a particular Anganwadi.

6. Full services:

All ICDS services should be available to those (children under six, pregnant or nursing mothers, and adolescent girls) who wish to be enrolled at the local Anganwadi.

7. Time-bound universalisation:

An explicit time frame for universalisation (based on the improved norms) should be clearly specified in the 11th Plan.

8. Equity:

In the process of extending the coverage of ICDS, priority should be given to SC/ST hamlets and urban slums. For rural areas, this would involve conducting a survey of SC/ST-dominated habitations and ensuring that all new Anganwadis are placed in these habitations until such time as universalisation has been achieved for this group. Special provisions should also be made

for other disadvantaged communities.

9. Inclusion:

Special provisions should be made for the inclusion of marginalised children in ICDS, including differently-abled children, street children, and children of migrant families. For instance, migrant children should be entitled to admission at the nearest Anganwadi.

10. Special focus on children under three:

A major effort should be made to extend ICDS services to all children under the age of three years, without affecting the entitlements of children in the 3-6 age group. In particular, this would involve posting a second Anganwadi worker in each Anganwadi (see below). Her primary responsibility would be to take care of children under three as well as pregnant or nursing mothers. This new focus would also involve giving much greater attention to "infant and young child feeding", nutrition counselling, ante-natal care and related matters.

I.3. Infrastructure

11. Independent buildings:

By the end of the 11th Plan, each Anganwadi centre (AWC) should have its own, independent pacca building. Construction grants should be made available for this purpose, and also for the maintenance of buildings. A specific proportion of ICDS funds could be earmarked for construction (e.g. 30%, as with Sarva Shiksha Abhiyan).

12. Dovetailing with NREGA:

To facilitate large-scale construction of AWCs, "construction of AWCs" should be added to the list of permissible works under NREGA. Additional funds for the material component could be mobilised from Bharat Nirman, the Backward Regions Grant Fund and related sources.

13. Minimum infrastructure:

Each AWC should have the minimum infrastructure and equipment required for effective delivery of ICDS services. A checklist of minimum facilities (including weighing scales, storage arrangements, drinking water, cooking utensils, medicine kits, child-friendly toilets, a kitchen shed, toys, etc.) should be drawn up.

14. Untied grants:

Each AWC should receive an annual untied grant (similar to the various untied grants under Sarva Shiksha Abhiyan and the National Rural Health Mission), to facilitate local initiatives aimed at improving the AWC facilities and environment.

I.4. Staff

15. Two-worker norm:

Each AWC should have at least *two* "Anganwadi workers" (AWWs), and an "Anganwadi helper" (AWH). The primary responsibility of the one Anganwadi worker should be to take care of children under three and pregnant or nursing mothers, in collaboration with the local Accredited Social Health Activist (ASHA) if any. The responsibility of the other would be to conduct pre-school for children in the 3-6 years age group (including providing them with the mid-day meal).

16. Concerns of Anganwadi workers:

AWWs should be recognised as regular, skilled workers and their concerns should be addressed, particularly those relating to work overload, inadequate remuneration, delayed salary payments and poor working conditions. Anganwadi workers should not be recruited for non-ICDS duties and their official job description should be adhered to.

17. Integration with ASHA:

Specific arrangements should be put in place to facilitate smooth coordination between AWWs and ASHAs. Examples include joint training programmes for AWWs and ASHAs, joint participation in the monthly "health and nutrition day" (see below), and joint home visits.

18. Improved training:

The regularity and quality of AWW/AWH training programmes should be improved. Training programmes should include training for care of new-born babies and children under three,

nutrition counselling, and pre-school education. Improved training is also required for supervisors, CDPOs and related staff. Joint trainings with ASHAs, ANMs and medical officers should be conducted to facilitate smooth coordination of ICDS with health services as well as supportive supervision.

19. Gender issues:

Women should be better represented among supervisors, CDPOs and other ICDS staff above the Anganwadi level. Training programmes and reinforcement structures should be sensitive to women's concerns, and geared to the empowerment of Anganwadi workers.

20. Staff recruitment:

Urgent action is needed to address the shortage of ICDS staff at all levels. Programme management structures should also be strengthened by inducting subject-matter specialists (e.g. for pre-school education, health and nutrition) at the District, State and Central levels, especially women.

II. Service-Specific Recommendations

II.1. Nutrition-related Services

SNP for children aged 3-6

21. Cooked food:

For children aged 3-6 years, the supplementary nutrition programme (SNP) should consist of a nutritious cooked meal prepared at the Anganwadi, based on local foods and with some variation in the menu on different days of the week.

22. Cost norms:

A provision of at least Rs 3 per child per day (at 2006-7 prices) and 80 grams of grain should be made for SNP in the 3-6 age group. This is similar to the norms being recommended for mid-day meals in primary schools[22]. The cost norms should be adjusted for inflation every two years using a suitable price index.

SNP for children below 3

23. Take-home rations:

For children below the age of three years, nutritious and carefully designed take-home rations (THR) based on locally procured food, delivered every week, should be the recommended option. A provision of at least Rs 3 per child per day (at 2006-7 prices) and 80 grams of grain should be made for SNP.

24. Nutrition counselling:

Supplementary nutrition should always be combined with extensive nutrition counselling, nutrition and health education (NHE), and home-based interventions for both growth and development, particularly for children under three. Special priority should be given to counselling and related services for "Infant and Young Child Feeding" (IYCF). In particular, IYCF counselling and support should be recognised as a 7th "service" under ICDS, with a clear budget head.

SNP for pregnant and nursing mothers

25. Take-home rations:

Nutritious take-home rations should be provided to pregnant and nursing mothers every month, on "health and nutrition day" (see below). Anganwadi workers should ensure that THRs also reach mothers who may have missed the "health and nutrition day".

Micronutrient supplementation

26. Iron and Vitamin A:

For children under six, national programmes for the prevention of Iron and Vitamin A deficiency should be implemented through ICDS. Appropriate doses and formulations should be specified by the ANM.

27. Iodine:

Iodised salt should also be used in all Anganwadis.

II.2. Health-related Services

28. Monthly "health and nutrition day":

In each AWC, a pre-fixed day of the month should be reserved for specific activities such as distribution of take-home rations to pregnant and nursing mothers, immunisation sessions, NHE sessions, weighing of

[22] Report of the Working Group on Food and Nutrition Security (chaired by Professor K. Sundaram), Planning Commission, 2007.

children under three, identification of severely malnourished children, and so on. The "health and nutrition day" can also act as a meeting point for the Anganwadi worker, ASHA and ANM, and an entry point for the involvement of Panchayati Raj Institutions (PRIs).[23] (See also "Anganwadi Divas" below.)

29. Medicine kits:

Every AWC should have a medicine kit with basic drugs (including ORS and IFA tablets), to be distributed by the Anganwadi worker with appropriate training as well as guidance from the ANM (unless adequate provision has been made for the ASHA to provide this service). The procurement of medical kits should be decentralised (detailed guidelines should be prepared for this purpose). Medicine kits should be inspected and replenished at the time of the monthly "health and nutrition day".

30. Severe malnutrition:

Rehabilitation facilities (e.g. Nutrition Rehabilitation Centres) should be available at the PHC level for children suffering from Grade 3 or 4 malnutrition, and their mothers. Anganwadi workers should be responsible for identifying such children and referring them to rehabilitation facilities. Financial provision should be made to support these children's families during the period of rehabilitation. Also, these children should be entitled to enhanced food rations under the Supplementary Nutrition Programme. ICDS and the Health Department should be jointly responsible for the prevention of severe malnutrition and hunger deaths.

31. Special training:

Anganwadi workers should receive training in Integrated Management of Neonatal and Childhood Illnesses (IMNCI).

II.3. Pre-School Education (PSE)

32. Right to Education Act:

Entitlements to pre-school education facilities for children under six should be included under the Right to Education Act.

33. Sarva Shiksha Abhiyan:

Pre-school education programmes, suitable for implementation through ICDS, should be developed under Sarva Shiksha Abhiyan (SSA). SSA funds should also be made available to strengthen existing PSE activities under ICDS, e.g. by arranging training programmes or supplying better equipment.

34. PSE facilities:

Each AWC should have basic PSE facilities including adequate space for indoor and outdoor activities (with clean and hygienic surroundings), appropriate charts and toys, etc.

35. Training and supervision:

Pre-school education should receive higher priority in AWW training programmes, and also in the support activities of ICDS supervisors and CDPOs.

36. Location of AWCs:

New AWC buildings should generally be situated on or near the premises of the local primary school, unless the latter is at some distance from the children's homes. When AWC and primary school are close to each other, they could share a common kitchen shed.

III. Further Recommendations

37. Outreach facilities:

An "outreach model" should be developed under ICDS to extend essential services (including immunisation and nutritional support) to hitherto excluded groups (e.g. street children and migrant families) through designated outreach workers.

38. Right to information:

All ICDS-related information should be in the public domain. The provisions of the Right to Information Act, including pro-active disclosure of essential information (Section 4), should be implemented in letter and spirit in the context of ICDS. All agreements with private

[23] Similar activities are being planned under the National Rural Health Mission (NRHM).

contractors (if any) and NGOs should be pro-actively disclosed and made available in convenient form for public scrutiny. All AWCs should be sign-posted and the details of ICDS entitlements and services should be painted on the walls of each Anganwadi. Social audits of ICDS should be conducted at regular intervals in Gram Sabhas and/or on "health and nutrition day".

39. Record maintenance:

The burden of record maintenance at the Anganwadi level should be reduced. As far as possible, record-keeping should be confined to registers that are mandatory under the ICDS Guidelines. The possibility of assigning some of the responsibility of record-keeping to persons other than the Anganwadi worker should be explored. This would also help to ensure some independence, objectivity and transparency in record-keeping.

40. Involvement of PRIs:

Steps should be taken to promote more active involvement of PRIs in the management and monitoring of ICDS, bearing in mind that "women and child development" is listed in the Eleventh Schedule of the Constitution. In particular, PRIs should be actively involved in the monthly "health and nutrition day" at the AWC, and in the selection of ICDS functionaries. Resources should be made available for training and capacity building of PRIs, e.g. under the Backward Regions Grant Fund.

41. Anganwadi Divas:

As an extension of the "health and nutrition day", a pre-fixed day of each month could be reserved not only for health and nutrition related activities but also for various forms of community participation in ICDS, such as wall painting at the Anganwadi, renovation of the AWC, preparation of PSE aids, social audits of ICDS services, and so on. This would help to foster public interest and involvement in ICDS.

42. Bal Adhikar Patra:

Each child under six should have a "Bal Adhikar Patra", combining birth certificate with immunisation details, weight at various ages, AWC registration, health checkup and sickness records , etc. Essential NHE messages could also be printed on this card. The card would be kept by the parents but the Gram Panchayat would be responsible for updating it regularly with the assistance of the Anganwadi worker as well as for maintaining a copy of the records at the Anganwadi and/ or Panchayat Bhawan.

ANNEXURE II

Maternity Entitlements

Current WHO guidelines clearly recommend that children must be exclusively breast fed during the first 6 months of life if they are to be properly nourished and protected from malnutrition and illnesses leading to death. In the year 2003, *The Lancet* published a child survival series, which showed proven and practical intervention for preventing or treating main cause of death among children younger than five. According to this analysis, breastfeeding was identified as the single most effective preventive intervention, which could prevent 13% to 16% of all childhood deaths. Thus, early breastfeeding, exclusively for 6 months and prolonged for 2 years, has the potential for significant impact on the high rates of malnutrition, infant mortality and neo-natal mortality plaguing the country. And this needs to be the strategy in the forefront of achieving Millenium Development Goal No. 4.

This issue is well understood and not under debate. Nevertheless, when it comes to actually supporting a strategy that requires the close proximity of mother and child for a minimum period of 6 months and up to 2 years if possible, India has little to offer more than 150 million women working in the informal sector and their children. Maternity entitlements and crèches on worksites; the two interventions that support breastfeeding; are practically missing in the entire jigsaw of interventions for promoting child health and nutrition through the various stages of her life. This, even with the understanding that the issue and the age is critical to prevention of malnutrition, morbidity and mortality. In sharp contrast, a small number of women working as government employees may receive up to 6 months of paid maternity leave and their husbands 15 days of paternity leave to care for their first two children.

It is also a fact that delivering maternity entitlements to women working in very diverse, sometimes invisible situations of labour is a difficult exercise. Nevertheless, there are specific interventions possible within the 11th plan that should be taken up as a matter of priority and some of these are discussed below.

Currently Available Benefits and Schemes

- National Maternity Benefits Scheme – Rs. 500, all BPL women. Most recently – no restriction by age of mother or birth order
- Maternity Benefits Act, ESI Act – 12 weeks, prevailing wage
- State Schemes – most recent – Tamil Nadu – Rs.1000 per month for 6 months; 3 months before and 3 months after delivery
- Construction workers TN – Rs.2000 though Rs.8000 demanded (Rs.80 per day for 100 days). Assured 6000 for consistency with new scheme (The Dr. Muthulakshmi Reddy Maternity Benefit Scheme of the Government of Tamil Nadu).

The scope and coverage of these is currently minimal. The Maternity Benefits Act, for example, does not rule out benefits for women working in the

informal sector, but does not determine any mechanisms for them to be able to avail them either, due to the absence of well defined employer or employment.

In terms of underlying principles for maternity entitlements, we recommend the following:

- All women – including adoptive mothers
- 2 weeks before and 6 months after child birth
- Prevailing wages in case of employed
- Minimum wage for those working without wages
- No discrimination on grounds of age, marital status, number of children or any other basis, but poverty may be the criterion for priority.

In terms of strategy:

- Need to use many different modalities for covering huge gap and large variations of situations of labour.
- II National Labour Commission – 4 categories:

1. Lowest level, or "safety net", for those who cannot afford to contribute. Provision to be made entirely by the State (Central and State Governments).

2. First level for all those who are employed in establishments. Provision to be shared between Government, employer and employee. Proportion of contribution by each sector to be determined.

3. For those employed in casual labour, contract labour, piece-work, self-employed or where employer is otherwise not visible, Government and employee alone will share.

4. Highest level, or "voluntary level", for those who can afford to contribute in the insurance model, shared by employee and employer. Contributions to be determined.

However, our recommendations on principles of strategy are as follows:

- All existing laws – MBA, ESI Act, proposed Unorganised Workers Social Security Act, etc., to be brought in line with recommended principles.
- Tripartite boards and funds to implement for all sectors of informal work so that employers contribute.
- Expanded and improved National Maternity Benefits Scheme for women left out of all above.

Other supports are critical and have been dealt with separately in detail. For the purposes of completion, these are:

- Ante natal care to all pregnant women.
- Nutrition counselling to all mothers for Infant and Young Child Feeding (IYCF).
- Crèches on work sites (crèches in neighbourhoods, support to a range of players, AWC+Crèche, outreach models) for continued care and IYCF, with breast feeding breaks and flexible work hours if required.

ANNEXURE III

Crèches and Daycare Arrangements

Crèches are an essential requirement for families where mothers need to work for survival, especially in the unorganised sector. It is estimated that 6 crore children under six are in need of daycare. In the context of increasing nuclearisation of families, breakdown of family support systems and casualisation of work, the need for childcare support for women has become critical.

Rationale for Daycare

While providing crucial daycare services, thereby allowing mothers to go for work, crèches are also an intervention in:

- reduction of IMR, CMR;
- prevention of malnutrition by facilitating continuing breast feeding and complementary feeding;
- promotion of growth, all round development and emotional security of children under six.
- facilitation of girl child's school entry and retention (by freeing older siblings from daycare responsibilities);
- protection of children from sexual abuse and neglect;
- empowering women to become economically productive and participate in national life;
- protecting women from discrimination faced by them during early childcare and breastfeeding. The above feed into gender equity and poverty reduction.

Current Status of Crèche Services

Currently crèches are provided under the Rajiv Gandhi Scheme for Crèches and under Labour Legislation. The coverage under the former is 22,038 crèches till 31st March 06. The provision of crèches under labour laws is negligible.

The need:

According to the NSS 55th Round, 1999-2000, there were 10.6 crore women in the workforce. 40-50% of them were in the reproductive age group. The gap between the need and provision of crèches is clear from the above.

Recommendations

To meet the enormous and diverse need for Daycare, the following broad strategies need to be taken on board:

1. Crèches provided under State/ NGO partnership:

There is need to increase the coverage of children under the Rajiv Gandhi Scheme for Crèches. (A Scheme geared to NGO management and their ability to raise additional resources).

2. Crèches as part of Government Schemes: ICDS:

Anganwadi cum Crèche which was recommended as a strategy in earlier plans, now needs to be implemented in the 11th Plan on a *pilot basis* for 10% of all Anganwadis. Provision of Anganwadi cum crèches under ICDS will require additional budget, additional human resources with suitable training and remuneration for *8 hours of responsible work*; attention to

space, infrastructure and equipment.

We recommend that the pilot model be called *ICDS Daycare Model* as a *full time* functioning centre requires differences in staffing, training, nutrition, equipment, etc. from the regular Anganwadis which are in the process of universalisation. The full day model will have implications for staffing, training, nutrition and management. If Daycare is just considered as an "add on", there are likely to be confusions and conflicts within the system, which will defeat the purpose of intervening more effectively in the safety, health and development of very young children.

The ICDS daycare model would require two full time workers and a helper. For children who stay in the crèche all day provisions should be made to feed them breakfast, a mid-morning snack, lunch and evening snack. These two workers would have to perform the regular duties of Anganwadi workers such as nutrition counseling, growth monitoring, building community awareness, conducting pre-school education and so on. Additionally they would also be responsible for running the crèche for the whole day. For this, they would also require an additional training (of 10 days) over and above the regular training that all Anganwadi workers receive. They would also require greater support from supervisory staff.

The Anganwadi centres that are under the ICDS daycare model would also require additional space to accommodate those children under three who come to avail of the crèche facilities. Waste for making dolls/ aids, Clothes for changing infants, napkins, Local toys, rattles, assistance for Preschool activities involving sand pit, dolls corner , puppets ,clay , etc. can be contributed by the community.

3. Crèches under the NREGA:

The provision for a crèche at all NREGA worksites, as provided for under the act must be implemented. Particular attention needs be paid to all NREGA districts so that women can avail of employment opportunities as well as have a safe place to leave infants where their basic needs are addressed. (The above is a *convergence strategy* to maximise use of investments in the NREGA Scheme).

4. Flexible models of Daycare:

Financial support is required for *flexible models of Daycare arrangements* to be delivered and managed by a range of players such as Mahila Mandals, Labour Unions, Self Helf Groups, Co-operatives , etc. who can meet the need based Daycare requirements for women in diverse occupational groups in diverse regions, on a per child basis of Rs 15/- per day per child. The above will permit flexibility in timings and need-based inputs as opposed to fixed budget components. Also support should be provided to local women who are willing to be trained for running home-based crèches. This is an additional strategy for enlarging the coverage of children in need of Daycare.

The rationale for flexible models *in addition* to the Rajiv Gandhi Scheme, is because the RG Scheme, while suitable for certain sections of the population, is limited in the following ways:

a. It is NGO dependent.

b. The schematic pattern and norms of the Scheme cannot respond to the diversity of situations in the country:, for e.g., in some areas, more expenditure is required for rented space than permitted. In some, parents can contribute food but require the crèche to function longer hours and therefore the expenditure on salaries needs to be higher , etc.

c. The Schematic pattern cannot respond to the needs of women engaged in occupations as varied as fisheries, forestry, seasonal agricultural occupations , etc.

d. The Scheme's criterion of eligibility is limiting. The term "working women" and "income criteria", needs to be revised.

Some necessary revisions that can be made for serving a wider clientele are as follows:

i. The concept of *working mothers* needs to be enlarged and replaced by "Daycare for children of poorer sections where either or both parents are working with special reference to sectors (artisans, home based workers, workers in agriculture, construction, etc.)"

ii. Rather than an *income criteria* for eligibility, a criteria of occupation and residential location needs to be introduced: since incomes fluctuate according to season, employment availability and size of family, eligibility should be defined as "poorest sectors" with occupations like home-based work, artisans, agricultural workers, etc., who reside in urban slums, dalit bastis, and other area where marginalised groups live. This will provide flexibility to target populations more accurately than the income criteria currently used.

5. Crèches which are industry linked:

Policy directions must be issued for compliance and implementation required under Labour laws. Labour Welfare Boards as under the Building and Construction Workers Act, 1996, need to be brought in as players for providing crèches. They can draw on Cess Funds, use Crèche Workers certified and trained by NIPCCD, NGOs, Indian Council for Child Welfare (ICCW), etc. and develop a cell for initiating crèches for workers.

6. Financial Strategies:

Additional resources will be required to increase coverage of Daycare by all the above strategies. A cess could be levied on industry that will go to build up a Childcare Services Fund, which can provide national support to developing a network of crèches across the country, and support for training of personnel, data collection and evaluation, etc.

ANNEXURE IV

Infant and Young Child Feeding

The Joint Statement on Infant and Young Child Feeding was submitted to the Deputy Chairman, Planning Commission on 29th December 2006 and then to the Prime Minister on 2nd of May 2007. This was a unique consensus among 16 national organisations, including professional and public health groups, calling for sharp focus on infant nutrition. Some new information has come since then, including a study published in the *Lancet* in March 2007, that confirms that exclusive breastfeeding can reduce HIV transmission to infants from HIV positive mothers by nearly half, making it imperative to universalise the coverage of exclusive breastfeeding. The study showed that if solids are added to infant's diet during exclusive breastfeeding, risk of transmission goes up 11 times. In 2007 WHO provided evidence on the long-term effects of breastfeeding, through systematic reviews and meta-analysis, showing that that subjects who were breastfed experienced lower mean blood pressure and total cholesterol, as well as higher performance in intelligence tests. Prevalence of overweight/obesity and type-2 diabetes was lower among breastfed subjects. All this points towards the link between optimal breastfeeding and human development and makes the recommendations of the joint statement even more justified.

Breastfeeding succeeds if a conducive environment is created that supports women. First of all, creating a suitable environment means that women and families are not subjected to commercial marketing of baby foods. **Baby food companies must put an end to ongoing exploitation of families.**

Next would be to bring a behavioural change at family and community level through **ongoing campaigns to reach family and community to break the existing myths**.

Then comes health services support to breastfeeding women. In order to breastfeed successfully, women **must have accurate information, practical help and assistance at the time of birth** and later. Two factors are vital to ensuring proper breastmilk supply: baby's suckling, which controls milk production, and women's confidence and state of mind, which controls breastmilk flow. Thus, women need to be physically close to their infants, and to be confident about their ability to feed their infants adequately. This often requires a supportive health system and skillful counselling. Many women give up breastfeeding because of the feeling that they cannot produce enough milk. This can be corrected through one-to-one counselling and building their confidence. A standardised educational package can be made available through **establishing countrywide infant and young child feeding /breastfeeding support centres managed and run by skilled health workers**.

Creating an environment in which women are able to meet their infants' right to nutrition means that some women may

need to be supported financially through **maternity entitlements and nutrition support**. It also means that women working in the organised sector, whether in public or private sectors, should be given maternity leave of at least six months. **Crèches** are also needed at work places.

On the top of this, a mechanism of accountability is needed to implement the action plan. This is where the role of an **authority** comes, which will help in coordination, convergence , and asking questions. **The authority will act as a national breastfeeding advocate and make it a peoples movement.** Other functions could include, integration of promoting IYCF across the Ministries and States, serve as a think tank to facilitate planning, technical support to both ministries, advocacy at all levels including states, monitor the implementation with the ability to research and evaluation, serve as a umbrella for all stakeholders for their rightful role, serve to coordinate the entire IYCF efforts in the country, and advise the Planning Commission on setting national goals for implementation of IYCF and resource allocation.

Following are the key recommendations.

The Joint Statement seeks to place infant nutrition at the centre of any infant and child nutrition and survival strategy, and calls upon the Prime Minister, as the Chairman of the Planning Commission, to:

1. **Create national authority/ specific coordination for optimising infant nutrition** like creating a national commission or authority on infant nutrition, which will serve as a strategic oversight and technical support. It will establish convergence, accountability mechanisms in Ministry of Health and Ministry of Women and Child Development and direct them to make plans of action to enhance optimal breastfeeding rates and review regularly.

2. **Put "breastfeeding education" or "infant and young child feeding counselling" as 7th service in ICDS**, and include in others like NRHM and RCH.

3. **Ensure adequate budgets are earmarked** for protecting, promoting and supporting breastfeeding in 11th plan

4. Provide **legislative support** to all women to enable them to begin breastfeeding within one hour of birth and maternity entitlements for poor women in unorganised sector giving cash benefit Rs 1000 per month for six months (Tamil Nadu model).

ANNEXURE V

Reducing Child Malnutrition: Thailand Experience (1977-86)

A Review of International Literature

Abstract:

Thailand has been one of the most outstanding success stories of reducing child malnutrition post 1970s. The international literature on Thailand experience provides varied assessments of the actual rate of decline in child malnutrition, depending upon different sources of data used. But it is unanimous in accepting Thailand's success in reducing child malnutrition. The literature also agrees that the success is attributable not just to the rapid economic growth but the direct nutrition programmes implemented by Thai government were much more responsible [Heaver 2002]. The major reduction in malnutrition rates was in the period 1980-1986 during which child malnutrition (underweight) rate was effectively reduced from 50% to 25% [Tontisirin et al 1992]. By internationally accepted NCHS standards the malnutrition rate reduced from 36% (NCHS <-2D) to 13% [World Bank 2006]. This success has considerable significance for nutrition programmes in India as the levels of per capita GDP, proportion of women in agricultural workforce and child malnutrition rates around 1980 in Thailand were similar to what we have in India in 2007 [Suntikitrungruang in Jennings ed.1989]. Thailand started intervening in Nutrition from 1961 onwards and launched large focused programmes on nutrition in 1977. These programmes managed to reduce child malnutrition (underweight) to 25% by 1986 and Anaemia to 27% by 1988 through a mix of interventions including intensive growth monitoring and nutrition education on breastfeeding and complementary feeding, strong supplementary feeding provision, high rates of coverage ensured by having high human resource intensity, Iron and Vitamin supplementation and salt Iodisation along with primary health care. Once it reached the level of around 20% malnutrition, strategies were changed to also include Food Coupons in 1988 which enabled malnourished children to get eggs, etc., from local shops [Kachondham et al 1992].

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Child Malnutrition (underweight %) in Thailand as per different data sources

	Nutrition Surveillance Division Report		National Sample Survey
Year	Moderate + Severe[1] Malnutrition (Thai Standard, Gomez Classification) [Heaver 2002]	Mild + Moderate + Severe Malnutrition (Thai Standard, Gomez Classification) [Tontisirin et al 1992]	(NCHS Standard < -SD) [Heaver 2002]
1979-82	15.13	50.79	
1983	6.7	35.23	
1984	4.47	29.33	
1985	4.11	28.45	
1986	3.25	25.09	25.8
1987	2.36	22.89	
1988	1.62	21.15	
1989	1.15	20.86	
1990	0.80	20.00	
1991	0.77	17.10	
1995			15.4

Evidence of Decline in Child Malnutrition in Thailand

The international literature quotes two sets of data on child malnutrition (underweight) rates in Thailand. Richard Heaver questions Thai government data prior to 1985 (Thailand's National Nutrition Programme: Lessons in Management and Capacity Development, World Bank, 2002) as it shows very high rates of decline around 1983 and is based on low weighing coverage. But Heaver agrees with the declining trend and says that the high rate of decline can be explained by the phenomenon that any nutrition programme in its initial years encounters more of the 'easier' cases which tend to respond better to its interventions. Heaver states that National Sample Survey data is more accurate and as per it the child malnutrition rate was 25.8% by 1986. This figure agrees with the Nutrition Surveillance Division Report quoted by Tontisirin et al (excerpt quoted below) which puts the figure at 25.09% in 1986. The nutrition standards followed in these two sources are slightly different but Heaver agrees that for under-2 year children, the difference would be negligible. Using NCHS standards, a recent World Bank publication has put the figures of malnutrition decline as 36% to 13% between 1980 and 1990 (NCHS <-2SD) [World Bank 2006]. Heaver also agrees with Tontisirin et al that the declining trend of malnutrition rate in Thailand continued further and it reached around 15% by year 1995. He further states that such sharp rate of decline can not be explained by economic growth alone and direct nutrition programmes of Thai government played a big role. Apart from Tontisirin et al, various research papers presented at 14th and 15th International Congresses on Nutrition (1989 to 1992)

[1] Division of Nutrition, Ministry of Public Health Using Thai growth reference of body weight as percent of standard weight: 90 and up (normal), 75-89 (mild), 60 74 (moderate) and below 60 (severe) cut-off points.

organised by United Nations various UN conferences underlined the fact that malnutrition rates in Thailand were reduced to half between 1980s. [Kachondham et al 1992, Suntikitrungruang 1989] . Thus, the literature is unanimous in accepting that Thailand's performance in reducing child malnutrition has been outstanding.

To quote Tontisirin et al (1992):

During the last decade, Thailand dramatically reduced the prevalence of protein energy malnutrition (PEM) in preschool children. PEM by weight-for-age in children under five (which reflects macro-nutrient deficiencies) was over 50% between 1979-1982. Growth monitoring was then institutionalised by the Division of Nutrition, Ministry of Public Health (MOPH), at the beginning in the Fourth National Economic and Social Development Plan (NESDP) in 1981, and it has achieved a coverage of more than 2.7 million pre-school children by 1991. Using a Thai growth standard, combined mild, moderate and severe malnutrition by weight for age, as shown in Table 1, declined consistently from approximately 50.8% in 1982 to 17.1% in 1991 (for moderate and severe combined, the decline went from about 15.13% to 0.77% in the same period).

Nutrition Programmes in Thailand

While Thailand had continuous and fast decline in child malnutrition between 1980 and 1995, the period 1980-86 is most important to draw lessons for India. It was the period when Thailand reduced its malnutrition rate from 50% to 25% which is close to the goal envisaged for India's 11th Five Year Plan. By 1988, the anaemia amongst children as well as women had reduced to 27.3% [Suntikitrungruang in Jennings ed.1989]. Thailand's success in this period (1980-86) was based on intensive nutrition programmes implemented by its government, especially during the period of 1977-1986 [Tontisirin et al 1992].

In 1977, the first National Health and Nutrition Plan (NHNP) was launched in Thailand though it had nutrition programmes with lesser budgets and coverage since 1961. The main interventions in the period 1977-81 were [Kachondham et al 1992]:

1. Focus on infants, pre-school children and pregnant women
2. Focus on Protein Energy Malnutrition (PEM)
3. Also targeted Iron, Vit A, Iodine and Riboflavin/ Thiamine deficiencies by providing tablets
4. Supplementary food was provided through Health department. It was centrally procured and processed at 1200 production centres set up for the purpose. Home delivery of supplementary food was provided for severely malnourished children [Tontisirin et al 1992].

The malnutrition rate however did not decline much till 1980 as the coverage was low (nearly 30%), the centralised processing of supplementary foods posed logistical problems in distribution and the interventions remained uni-sectoral as health care and agriculture continued to be neglected. But the programme did succeed in bringing the focus on malnutrition as an issue of national importance and created the momentum for more effective interventions in the subsequent phase [Kachondham et al 1992].

The Second National Health and Nutrition Plan (NHNP) 1982-86 was able to address many of the earlier weaknesses [Kachondham et al 1992]. It combined the focus on nutrition with health care and poverty alleviation. A large cadre of health and nutrition workers: Voluntary Health Communicators (VHCs) and Voluntary Health Volunteers (VHVs) was created [Kachondham et al 1992]. The cadre strength rapidly grew to reach the level of one worker per

2ύ children [World Bank 2006]. The annual cost of this component alone was around $1 per child [World Bank 2006]. The number of VHCs and VHVs reached 500,000 and 50,000 respectively by 1989 and this ensured very high programme coverage [Kachondham et al 1992]. These workers were provided intensive training inputs [Kachondham et al 1992].

It had the following key interventions: [Kachondham et al 1992]

1. Nation wide growth monitoring, additional attention paid to moderate and severely malnourished
2. Nutrition Education on breastfeeding promotion, complementary feeding, correction of food taboos , etc.
3. Promoting production of nutritious foods like legumes, sesame, fish and poultry by communities
4. Decentralisation of production and distribution of Supplementary Foods to community level. Formulation consisted of rice, beans, groundnut/sesame. Each child was provided 100 g of the formulation per day providing around 450 kcal and 12-14 grams of protein. In addition, malnourished children were also provided take home rations [Dhanamitta et al 1985].
5. Iodisation of Salt
6. Tablets for Iron, Vitamins [Winichagoon 2001]

To quote Tontisirin et al (1992):

The First through Fourth National Health Development Plans

The first important step in the development of Thailand's national health and nutrition policies was the formulation of a series of five-year National Health Development Plans (NHDP) as a part of the National Economic and Social Development Plan (NESDP) started in 1961. The First five-year NHDP emphasized the construction and expansion of health facilities especially at the provincial level. The Second and Third NHDPs shifted this emphasis towards optimising resource use. This fostered greater planning coordination between national, regional and provincial levels resulting in an increase in available resources for public health facilities. There was also a strengthening of new programmes in line with national socio-economic development goals, most notably maternal and child health care, family planning, nutrition, development and environmental health, and communicable disease control and eradication.

While nutrition was one focus of these three plans, it was a small, integrated portion of health service activities which still had very low coverage and an emphasis on curative, rather than preventive aspects. Another major facet of these plans, especially towards the end of the Third five-year plan, was a heightened concern on increasing the number of qualified health personnel and their capacity to undertake work in line with the NHDP. This was prompted by the need to expand the range of existing health facilities in order to improve their availability .

The Fourth NHDP (1977-1981) was the first time that full attention was given to formulating a concrete five year strategy which took into serious consideration the need to upgrade and expand government health services to people living in rural areas with a quality comparable to that provided in urban settings. During this plan, a number of district hospitals were constructed which led to a target of increasing the number of health personnel in various fields, especially those who would work in rural areas. It was during the Fifth NHDP, however, that a concerted attempt was made for full coverage of general and specialised hospitals at the provincial level, community hospitals for districts, and health centres at the subdistrict level.

The First National Food and Nutrition Plan

Historically, Thailand's nutrition programme was a component of

the National Health Development Plan. But it was not until 1977 that the First National Food and Nutrition Plan (NFNP) was included as an entity in the Fourth National Economic and Social Development Plan (NESDP) (1977-1981). This coincided with the implementation of the Fourth NHDP. Since it was clear that malnutrition was a multifaceted problem, a multisectoral approach was devised. Thus, a National Food and Nutrition Committee was appointed, consisting of members representing various ministries, especially the four major Ministries of Agriculture, Education, Health and Interior (community development). A committee at the provincial level with a similar composition was also appointed.

The First NFNP listed seven major nutrition problems: protein-energy malnutrition, iron-deficiency anaemia, vitamin A deficiency, beri-beri from thiamine deficiency, goitre caused by iodine deficiency, angular stomatitis induced by riboflavin deficiency, and urinary bladder stone disease resulting from phosphorous deficiency. Protein-energy malnutrition was considered the most significant and a priority problem because of its high prevalence, especially among pregnant and lactating women and preschool and school-aged children. Possible causes were identified as inadequate food production for household consumption; inefficient and inequitable food market system; poverty and high population growth; improper food habits and lack of nutrition education and inadequate health services.

The First NFNP set out ambitious and comprehensive goals to improve the nutritional status of the population by tackling it on many fronts, most notably the improvement of health care and hygiene; increased food availability; nutrition education; and improvement of socioeconomic conditions of the vulnerable groups. The plan targeted rural infants, preschool children (children under age five), pregnant and lactating women, and, to a lesser extent, school-aged children. At that time it was estimated that 55 000 infants and preschool children died annually due to PEM as either a direct or associated cause of death.

Although both short- and long-term strategies and activities were formulated, short-term actions to remedy severe and moderate malnutrition were the most obvious outputs which were largely achieved by feeding children high-protein supplements at Child Nutrition Centres (approximately 1200 were constructed). These foods were centrally produced and supplied through the health system to the periphery. Home delivery of supplementary foods was provided for children with severe malnutrition .

Yet by the end of the First NFNP, the nutrition programme was not fully implemented due to the lack of inter- and intra-sectoral collaboration, little involvement of people, and many policies were not successful in attaining their set objectives, such as the central production of supplementary food and creation of village nutrition rehabilitation centres. Although some action plans were well-defined, planning was entirely a top-down approach. Planning, authorisation and budget allocations were decided at the central or provincial levels and vertically channeled to the grass-root levels (districts, subdistricts, communities). No single agency, however, was responsible for overall coordination and monitoring of programs. There was no change in the programme planning and budget allocation structure to support multisectoral efforts. There was also very little participation by the community.

It was not surprising that the First NFNP produced limited results. Malnutrition continued to be a serious problem, especially protein-energy malnutrition among infants and preschool children and iron-deficiency

anaemia among children, pregnant and lactating women. A 1980 nationwide survey showed that 53% of preschool children suffered from protein-energy malnutrition. However, the most significant accomplishment of this plan was the creation of a strong awareness of nutritional problems among public and private sectors alike and at all levels. This led to an even stronger political commitment on the part of the nation's policy makers.

The Fifth National Health Development Plan (1982-1986) and the Second National Food and Nutrition Plan

The Fifth NHDP's main policy centreed firmly on people participation as opposed to the government shouldering the entire burden. The primary health care (PHC) approach was seen as a practical mechanism for attacking many of the persisting health problems of the time. This led to the nationwide training of village health volunteers and village health communicators which are now found in virtually every rural village. Regarding health infrastructure development, the top priority was given to districts and communities. At least one hospital was made available in each district area which also spawned a remarkable increase in the number of lower level health facilities, particularly community hospitals, and subdistrict health centres.

Likewise, the Fifth NESDP (1982-1986), which coincided with the Fifth NHDP, continued to include the food and nutrition plan, however the planning concept and approach changed. Rather than being a food problem, malnutrition was recognised as a manifestation of poverty and ignorance. Consequently policy makers and planners targeted the eradication of poverty as the chief control measure. Nutrition programmes employed during the Fourth NESDP were seen as only stopgap measures to relieve the most severe forms of malnutrition until more systematic solutions could be developed.

As in the First NFNP, the Second NFNP's main target groups were infants and preschool children as well as pregnant and lactating women. Moreover, this plan also paid greater attention to school-aged children. The Second NFNP's goals were also more quantifiable, that is, the elimination of severe malnutrition among target groups, a reduction in moderate malnutrition by 50% and mild malnutrition by 25% in infants and preschool children, and a reduction in protein-energy malnutrition by 25% in infants and preschool children, and a reduction in protein-energy malnutrition by 50% in school-aged children, and the eradication of iodine deficiency goitre in nine endemic provinces in the North.

The main nutrition policity thrust during this period rested within the broader national social development policy (Fifth NESDP). The latter centreed on a Poverty Alleviation Plan (PAP) entailing the development of backward areas along with a primary health care (PHC) approach for health development. This emphasis marked an important turning point in Thailand's developmental approach which formally focused attention an overall economic growth and its trickle down effects for rural development. The strategies employed to solve malnutrition and improvement of the nutritional status of the population included the following.

First, nutrition surveillance included growth monitoring by using weight charts, prevalence of goitre, clinical signs of anaemia and angular stomatitis. A child was weighed every 3 months at a community weighing post. For a case of moderate or severe PEM, or for a child who did not gain weight, he/she would be weighed monthly along with a monthly supplementary feeding program. PEM cases

with complications such diarrhoea, measles or pneumonia were referred to a nearby health centre.

Second, nutrition information, education and communication emphasized increasing food and nutrition knowledge during pregnancy and lactation periods, promotion of breast feeding, introduction of proper supplementary foods, increased awareness of the five food groups, food hygiene and correction of false food beliefs and taboos.

Third, production of nutritious foods in communities was also promoted through such activities as home gardening, growing of fruit trees, cultivation of legumes and sesames, fish ponds, and the prevention of epidemic diseases in chicken.

Fourth, supplementary food production and supplementary feeding programme at village level has also strengthened. Supplementary food mixtures containing rice, legumes and sesames or rice, legumes and peanut were prepared at the community level by women's groups with the support of village health communicators (VHC) and village health volunteers (VHV). These food mixtures could be kept for 1-2 months and used for the supplementary feeding of severe and moderate PEM cases in the community[4]. The mixtures were also sold to the mothers or to nearby villages. Income from such sales was successfully used to establish village nutrition funds for development.

Fifth, school lunch programmes covering 5000 schools in the poverty areas were established. This programme was eventually expected to be community-supported with only initial funds being provided by the Ministry of Education .

Sixth, food fortification was emphasized in terms of salt iodisation and distribution to endemic goitre areas through both the health infrastructure and private channels.

Seventh, training was provided for health personnel, VHC and VHV, as well as community leaders.

The success in implementing community-based nutrition programmes was further strengthened and accelerated by the long-term policy of improving people's quality of life through the Poverty Alleviation Plan in which policies placed nutrition as an important component for reaching the Health for All goal.

Post 1986 period

In the third National Health and Development Plan, further new strategies were introduced. In addition to decentralised production and distribution of supplementary foods, food coupons were introduced through which moderate and severely malnourished children were able to get eggs , etc. from local shops. Each child got food coupons worth 3 baht (Rs.6 approx.) per day and it was increased to 5 baht (Rs. 10) by 1991 [Kachondham et al 1992]. But the overall budget required for the purpose was not very high as Thailand had already reached low levels of child malnutrition before 1988.

To quote Kachondham et al (1992):

A new strategy of food coupons was then introduced in addition to the village food processing in 1988. The food coupon was given to individual children who were second and third degree malnourished. A monthly booklet of thirty coupons, each worth 3 baht in 1988 was given to the mothers of these children (5 baht in 1991). Every day, one coupon could be used at the local shop on specific items of food indicated on the coupon, such as eggs. Authorised shop owners in the village collected the coupons and were reimbursed from the sub-district health office.

Thailand's impressive success in combating anaemia amongst pregnant women and pre-school

children was based on universal Iron Supplementation which it continued from mid 1970s till date. In 2000, it extended this strategy to school going children by introducing weekly Iron supplementation for them in year 2000 [Winichagoon 2001].

Lessons for India

Based on this review, we draw the following lessons of India's nutrition programmes for 11th Plan:

Have a strong Supplementary Food programme:

Thailand provided 450 kcal and 12-14 gram of protein supplementation per 100 gram of food which included pulses and fats in addition to cereal. In India we have been providing only 300 kcal per 100 gram of SNP and that too mainly as cereal. Secondly, success was more pronounced after 1982 when decentralised production and distribution was instituted. In comparison, India has had highly centralised SNP system with obvious delays and leakages. Thirdly, for malnourished children, both moderate and severe, Thailand provided home delivery of supplementary foods. In India, there have been gaps: a) provision of additional rations has been limited only to severely malnourished children and moderately malnourished children have been left out b) the additional provision is in form of more cereal which is completely inappropriate for tackling severe malnutrition. c) there has been no system of home delivery of food to malnourished children

Ensure High Coverage:

Thailand's programme during 1977-81 did not achieve much change as the coverage was only 30%. Thailand was able to achieve major reduction in child malnutrition only after 1982 when its programmes ensured high coverage rates. In India, the coverage rates so far have been very low.

Ensure nation wide growth monitoring and effective nutrition education on breastfeeding and complementary feeding by having high human resource intensity:

Thailand was able to ensure intensive growth monitoring and nutrition education mainly through Village Health Communicators (VHCs). It reached a level of one nutrition worker per 20 children by 1990 and spent $11 per child per year on human resources. This enabled them to adequately address breastfeeding and complementary feeding issues. India also has a cadre of Anganwadi workers equivalent to the VHCs in Thailand. But the number of children per Anganwadi worker is close to a hundred. This reduces her ability to provide intensive growth monitoring and nutrition education services.

Give Iron and Vitamin supplements a real chance:

Thailand was able to reduce Anaemia to low levels by 1988 by using Iron and Vitamin tablets for supplementation and ensuring high coverage. In India, similar programmes have been present but with huge gaps. Iron tablets for children and Vit A supplements have been mostly missing. Improved forms and regular supplies backed by health education can achieve desired effectiveness.

Back nutrition programmes with strong primary health care linkage and agricultural development:

Thailand achieved fast improvements in child nutrition status when it combined nutrition programmes with strong provision of primary health care from 1982. The programme also converged well with poverty alleviation and agriculture based strategies like promotion of legumes, sesame, poultry , etc. India also has an opportunity of improving health linkages through National Rural Health Mission.

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